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Letter of Transmittal

Attention:	Amy Axon NCDENR IHSB Date: August 5, 2016		
Project reference:	Carter G. Woodson Charter Middle School NONCD0001408 Former AT&T Technologies Vargrave Plant	Project number:	60476557

We are sending you the following:

Number of originals:	Number of copies:	Description:
1		Final Phase II Remedial Investigation Work Plan

Amy,

Please find attached the Final Phase II Remedial Investigation Work Plan for the Carter G. Woodson Charter Middle School. This work plan incorporates changes requested by the NCDEQ in emails dated July 5 and July 29, 2016. Please let us know if you need additional copies or have any questions about this submittal.

Sincerely,

Erin Stewart

Erin Stewart, PG
Project Manager

AECOM **Environment**

Submitted to
NCDEQ - IHSB
Raleigh, NC

Submitted by
AECOM
Morrisville, NC
60476557
August 2016

Final Phase II Remedial Investigation Work Plan

Alcatel-Lucent USA Inc.
Carter G. Woodson Charter Middle School (NONCD0001408)
Former AT&T Technologies Vargrave Plant
420 Goldfloss Street
Winston-Salem, Forsyth County, North Carolina

AECOM Environment

Submitted to
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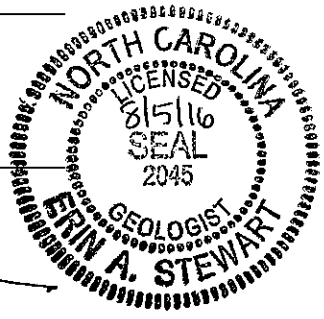
Final Phase II Remedial Investigation Work Plan

Steven Pires

Prepared By Steven Pires

Erin Stewart

Prepared By Erin Stewart, PG



Barbara L Oslund

Reviewed By Barbara L. Oslund, PE

Alcatel-Lucent USA Inc.
Carter G. Woodson Charter Middle School (NONCD0001408)
Former AT&T Technologies Vargrave Plant
420 Goldfloss Street
Winston-Salem, Forsyth County, North Carolina

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List of Acronyms

2B Standard	May 2013 North Carolina 2B Surface Water Quality Standard
2L Standard	April 2013 North Carolina 2L Groundwater Quality Standard
Alcatel-Lucent	Alcatel-Lucent USA Inc.
AECOM	AECOM Technical Services of North Carolina, Inc.
bgs	below ground surface
Challenges	Challenges of the Twenty-First Century, Inc.
DPT	direct-push technology
DWM	Division of Waste Management
EPA	United States Environmental Protection Agency
GPR	ground penetrating radar
IDW	Investigative derived waste
IHSB	Inactive Hazardous Sites Branch
NCDEQ	North Carolina Department of Environmental Quality
PCE	Tetrachloroethylene
PoG	Protection of Groundwtaer
PPE	personal protective equipment
PSRG	Preliminary Soil Remedial Goal
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
RI	Remedieal Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
Site	Carter G. Woodson Charter Middle School property located at 420 Goldfloss Street, Winston-Salem, Forsyth County, North Carolina
SVOC	Semi-Volatile Organic Compound
TCE	trichloroethylene
VOC	volatile organic compound
Woodson Middle School	Carter G. Woodson Charter Middle School

1 Introduction

This final Phase II Remedial Investigation Work Plan (RIWP) was prepared by AECOM Technical Services of North Carolina, Inc. (AECOM) on behalf of Alcatel-Lucent USA Inc. (Alcatel-Lucent) for the Carter G. Woodson Charter Middle School (Woodson Middle School) project site located at 420 Goldfloss Street, Winston-Salem, Forsyth County, North Carolina, Site ID #NONCD0001408 (the Site).

A Phase I Remedial Investigation Report (RIR) was submitted to the North Carolina Department of Environmental Quality (NCDEQ) Division of Waste Management (DWM) Inactive Hazardous Sites Branch (IHSB) on March 11, 2016 (AECOM, 2016). Based on the results and conclusions of the Phase I RIR, more data is needed to better define contamination on the Site. A description of work activities designed to delineate contamination is proposed in this Phase II RIWP. This final work plan addresses revisions to the work plan requested by the IHSB in emails dated July 5 and July 29, 2016.

Environmental impacts at the Site were discovered in May 2014 during a Phase II Environmental Site Assessment conducted on behalf of BB&T Environmental Risk Management for the Carter G. Woodson Charter School. Challenges of the Twenty-First Century, Inc. (Challenges) owns the Site property and its primary purpose, according to publically-available information, is to support the Carter G. Woodson Charter School.

1.1 Current Regulatory Status

In September 2014, Alcatel-Lucent was contacted by the NCDEQ DWM IHSB as a potential responsible party for impacts to environmental media on the Site. According to historical documents provided to Alcatel-Lucent by NCDEQ, AT&T Network Systems (a corporate predecessor to Alcatel-Lucent) leased the 420 Goldfloss Street property and operated a circuit board assembly facility there from 1970 to 1988. In January 2015, Alcatel-Lucent submitted a Site Conditions Questionnaire to the IHSB based on data and reports provided to Alcatel-Lucent by NCDEQ, which had received the data and reports from the current property owner. The IHSB responded to the questionnaire in a letter dated February 16, 2015, and stated that the Site is a high priority for assessment.

To address the high prioritization of the Site, AECOM prepared a Phase I RIWP (AECOM, 2015a) which was approved by the IHSB in an email dated July 16, 2015 (NCDEQ, 2015a). The Phase I Remedial Investigation (RI) began on July 17, 2015. After evaluating soil data collected during prior investigations by parties other than Alcatel-Lucent and the Phase I RI sampling results, AECOM determined that soil volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were not fully delineated and a background evaluation of metals in soil was needed. To address these data gaps, two addendums to the Phase I RIWP were prepared, the *Soil Delineation Work Plan* and the *Background Metals Work Plan* (AECOM, 2015b and AECOM, 2015c). These addendums to the Phase I RIWP were submitted to NCDEQ, approved, and implemented in November 2015. Results from the Phase I RI and addendums were summarized in the Phase I RIR (AECOM, 2016).

Separate from the Site assessment work that Alcatel-Lucent is conducting under the oversight of the IHSB, the property owner is seeking a Brownfields Agreement to enter the school properties into the North Carolina Brownfields Program. A *Notice of Intent to Redevelop a Brownfields Property* for the school properties was posted on NCDEQ's website on May 2, 2016 (NCDEQ, 2016). The public comment period closed May 31, 2016.

1.2 Site Location and Surrounding Land Usage

The Site property is located at 420 Goldfloss Street in Winston-Salem, Forsyth County, North Carolina (Figure 1). The approximate geographical center of the Site property is at 36° 3' 56.22" north latitude and 80° 13' 58.006" west longitude (North American Datum of 1983), and elevation ranges from approximately 830 to 880 feet above mean sea level (National Geodetic Vertical Datum of 1929).

The Site is currently owned by Challenges and occupied by the Carter G. Woodson Charter Middle School, which was built in 2007. The Site consists of one 32.38-acre parcel (Forsyth County Parcel ID 6834-54-7909.00) and is developed with one single-story building (16,097 square feet), one athletic field, and two storage sheds. The middle school building contains classrooms in the western portion and a gymnasium in the eastern portion. The athletic field was constructed within a former asphalt parking lot.

The middle school building, athletic field, and storage sheds are located on the eastern portion of the parcel. The main entrance to the Woodson Middle School is on the north side of the building, facing Goldfloss Street. The area between the middle school building and Goldfloss Street contains a paved parking lot, access driveways, and landscaped medians. One access driveway wraps around the western side of the middle school building to the back (south) side of the building, ending in a turnaround near the storage sheds. South of the middle school building is an athletic field surrounded by a former parking lot, connected to the access driveway by a sidewalk. The remaining eastern portion of the property and the entire western portion are undeveloped, wooded land. An unnamed tributary to Salem Creek flows south/southwest along the southern boundary of the Site parcel. A layout of the Site property's current and historic conditions is provided in Figure 2 and 3, respectively.

A complete Site history including surrounding land usage, hazardous waste management practices, Resource Conservation and Recovery Act status, environmentally sensitive areas, property ownership history, operational history, environmental permit history, previous environmental investigations, potable water sources, and sensitive receptors was included in the Phase I RIWP (AECOM, 2015a) in accordance with the IHSB Guidance Document (NCDEQ, 2015b).

1.3 Investigation Objectives

The primary objective of this Phase II RI is to delineate the lateral and vertical extent of contamination in all media for each constituent of concern identified during the Phase I RI (AECOM, 2016), in accordance with the IHSB Guidance Document (NCDEQ, 2015b).

2 Constituents of Concern and Analytical Parameters

This section of the work plan presents the constituents of concern for each media based on previous investigations summarized in the Phase I RIWP (AECOM, 2015a) and the Phase I RIR (AECOM, 2016). This section of the work plan also presents the proposed analytical parameters and methods for the Phase II RI.

2.1 Soil Constituents of Concern

2.1.1 VOCs

The following constituents are the only VOCs detected in soil above the IHSB Residential Health-Based or Protection of Groundwater (PoG) Preliminary Soil Remediation Goals (PSRGs):

- Tetrachloroethylene (PCE)
- Dichloromethane (methylene chloride)

2.1.2 SVOCs

The following constituents are the only SVOCs detected in soil above the IHSB Residential Health-Based or PoG PSRGs:

- 2-Methylnaphthalene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Carbazole
- Dibenzo(a,h)anthracene
- Indeno(1,2,3-cd)pyrene
- Naphthalene

2.1.3 Metals

Antimony, thallium, and manganese were detected in soil at concentrations that exceed their respective PSRGs and site-specific background threshold values (AECOM, 2016). However, the concentrations of these metals are believed to be attributable to naturally occurring metals and not directly associated with historical industrial activities at the Site. Additional sampling and delineation of inorganic constituents is not proposed.

2.2 Groundwater Constituents of Concern

2.2.1 VOCs

The following constituents are the only VOCs detected in groundwater above the North Carolina 2L Groundwater Quality Standards (2L Standards):

- PCE
- Trichloroethylene (TCE)

2.2.2 SVOCs

No SVOCs were detected in groundwater samples collected from existing monitoring wells at the Site.

2.3 Surface Water

The following constituents are the only VOCs detected in surface water above the North Carolina 2B Surface Water Quality Standards (2B Standards):

- PCE

2.4 Sediment

No VOCs were detected in sediment samples above the applicable United States Environmental Protection Agency (EPA) Region 4 Ecological Freshwater Sediment Screening Values. Therefore, additional sediment sampling is not proposed.

2.5 Analytical Parameters and Methods

Table 1 presents the analytical parameters and methods proposed for this Phase II RI based on the constituents of concern for each media. Proposed analytical parameters and methods are also summarized below.

- Soil VOC parameters for samples intended to delineate known impacts include the three VOCs that have been detected above PSRGs or 2L Standards, plus their daughter products.
- Soil SVOC parameters for samples intended to delineate known impacts include the nine SVOCs that have been detected above PSRGs.
- Soil VOC and SVOC parameters for samples intended to evaluate a new area of the Site for potential soil impacts include the full target compound list of VOCs and SVOCs plus the ten largest peaks for tentatively identified compounds.
- Groundwater VOC parameters for all samples include all VOCs previously detected plus their daughter products.
- Groundwater SVOC parameters for samples from proposed new wells also include the nine SVOCs that have been detected above PSRGs.
- Surface water VOC parameters include all VOCs previously detected in groundwater plus their daughter products.

3 Proposed Methods of Investigation

This section of the Phase II RIWP presents the proposed methods for the Phase II RI as required by the IHSB Guidance Document (NCDEQ, 2015b).

3.1 Utility Locate and Survey

Prior to conducting intrusive sampling or drilling at the Site, AECOM will contact North Carolina 811 to report planned drilling activities and request underground utility mark-out of the Site. In addition, AECOM will contract a private utility locator to locate and mark underground utilities at the Site using a combination of electromagnetic and ground penetrating radar (GPR) techniques. Electromagnetic methods are suitable for locating utilities containing metallic wire, cables or pipes. GPR locating methods may be used to locate and determine the depth of non-metallic utilities and other buried structures. Identified underground utilities will be marked with paint, and their locations will be recorded using a global positioning system device. In addition to the Site utility mark-out, each boring or drilling location will be hand cleared to a minimum depth of 5 feet below ground surface (bgs) to provide an additional measure of safety from potential utility strikes. Boring and drilling locations will be adjusted as necessary to avoid areas of suspected or known underground utilities.

3.2 Sample Collection Procedures and Locations

The following sections provide a description of intended procedures, locations, depths and justification for proposed collection points, and media to be sampled. The Standard Operating Procedures found in the EPA Region IV Science and Ecosystem Support Division *Field Branches Quality System and Technical Procedures* (EPA, 2016) documents will generally be followed for sampling soil, groundwater, and surface water, unless otherwise specified.

The proposed sampling locations and depths are described in Tables 2 through 5. The final sampling program will be adjusted based on field conditions. Deviations from the sampling program will be summarized and justified in the Phase II RI Report.

3.2.1 Direct-Push Technology Soil Sampling

Based on the results from the Phase I RI, additional soil sampling is required to delineate the lateral and vertical extent of soil impacts. An additional 31 direct-push technology (DPT) boring locations are proposed (DPT-13 through DPT-43) for soil sampling. Figures 4 and 5 show the locations of the proposed delineation soil borings in relation to existing soil VOC and SVOC data. Table 2 summarizes the proposed soil sampling approach and rationale. Table 3 presents a summary of the proposed soil samples and depths.

To evaluate potential surface soil impacts within the proposed footprint of a cafeteria the school plans to construct this fall to the east of the current middle school building, another eight DPT borings are proposed (DPT-44 through DPT-51). The final design for the cafeteria has not been finalized, but draft designs include a 66-foot by 88-foot modular building. Therefore, a conservative building footprint of 100 feet by 100 feet was assumed for sampling purposes and was divided into a grid pattern with grid lines 50 feet apart in accordance with the IHSB Guidance Document (NCDEQ, 2015b). Boring locations are proposed at each grid intersection, with the exception of the southwest corner where there are already several borings proposed for delineation purposes. Figures 4 and 5 show the approximate

footprint of the cafeteria building and the proposed borings. Table 2 summarizes the proposed soil sampling rationale and Table 3 presents a summary of the proposed soil sample depths.

Soil borings will be advanced to the target sampling depths (Table 3) and continuous soil cores will be collected and logged for lithology. Proposed soil sample locations and analytes were determined using the Phase I RI soil SVOC and VOC results. Soil sample intervals were determined by considering the nearest Phase I RI soil boring(s) which exceeded the PSRG and collecting samples at, above, and below the sample interval containing the exceedance from the Phase I RI.

Samples collected for VOC analysis will use Method 5035, which requires collection of an approximate 5 gram undisturbed plug of soil that is obtained directly from the soil core with a hand held sample coring device. Soil samples collected for SVOC analysis will be composite samples from a 1 or 2-foot depth interval that will be homogenized using the quartering procedure employed during the Phase I RI and outlined in the EPA Region IV *Soil Sampling Standard Operating Procedures* (EPA, 2014). SVOC samples will then be transferred to laboratory prepared containers using the alternate shoveling method, which involves placing a spoonful of soil in each container in sequence and repeating until the containers are full.

Vegetation clearing will likely need to be implemented to access proposed sample locations DPT-38 through DPT-43 due to heavy vegetative cover.

After soil samples have been collected, the DPT borings will be abandoned using bentonite or cement grout.

3.2.2 Direct-Push Technology Groundwater Sampling

DPT groundwater samples will be collected from six new locations on the southwestern potion of the Site property to delineate shallow groundwater VOC impacts. Groundwater VOC data from the DPT samples will be used to identify locations for permanent shallow monitoring wells. Figure 6 shows the groundwater potentiometric surface map from August 2015, as presented in the Phase I RI Report. Figure 7 shows the proposed DPT groundwater sampling locations.

The end of the DPT rods will be equipped with a 4-foot or 5-foot long retractable stainless steel screen. Groundwater samples will be collected by advancing the DPT rods to the desired depth, then retracting them to expose the screen. Groundwater samples will be collected using new polyethylene tubing and a peristaltic pump or check valve sampling device. A minimal amount of water (less than 1 liter) will be purged prior to collecting the groundwater samples.

AECOM proposes to collect two grab groundwater samples per boring, one groundwater sample near the water table and one sample at DPT refusal. DPT groundwater samples will be designated GW-12 through GW-17 with the depth interval listed in the sample ID. DPT groundwater samples will be analyzed for VOCs.

Site clearing and preparations may need to be implemented in order to access proposed sample locations GW-16 and GW-17 due to heavy vegetative cover.

After groundwater samples have been collected, the DPT borings will be abandoned using bentonite or cement grout.

3.2.3 Monitoring Well Installation and Sampling

Based on the results from of the Phase I RI, additional monitoring wells are proposed to delineate the lateral and vertical extent of VOC groundwater contamination at the Site. AECOM estimates that two shallow wells (MW-7 and MW-8) and one deep well (MW-3d) will be installed for this purpose.

Proposed monitoring well locations are shown on Figure 7. Well locations may be adjusted based on the results of the DPT samples. Prior to well installation, AECOM will obtain monitoring well permits from the Division of Water Resources, Winston-Salem Regional Office.

Shallow wells MW-7 and MW-8 are proposed to delineate the western and southwestern extent of shallow groundwater impacts. These wells will be Type II (single-cased) and screened in saprolite at depth intervals to target the highest VOC concentrations based on the DPT groundwater samples discussed above. Shallow wells will be installed using hollow-stem auger drilling techniques. Split-spoon samples will be collected approximately every five feet and logged for lithology. Wells will be constructed of 2-inch diameter schedule 40 polyvinyl chloride (PVC) casing with 10 feet of 0.010-inch slotted PVC screen. A sand pack will be placed in the annulus of each borehole to a height of approximately two feet above the top of the well screen. A bentonite seal will be placed approximately two feet above the sand pack and hydrated. The remainder of the well annulus will be filled with grout to the ground surface. Each well will be secured with a locking expansion plug, and completed with a protective cover surrounded by a two-foot square concrete pad. The type of protective cover (flush-mount manhole or stick-up cover) will consider the surrounding cover and the property owner's preference.

Deep well MW-3d is proposed to delineate the vertical extent of groundwater impacts in the source area. Well MW-3d will be Type III, with the outer casing set approximately five feet into competent bedrock and screened in the first water-bearing fracture in shallow bedrock. This well will be installed using an air rotary/air hammer drilling rig.

After the construction is complete, each well will be developed to remove fines from the sandpack and screen and to establish connection with the surrounding aquifer material.

AECOM will conduct a site-wide groundwater sampling event of all wells following installation of the new wells. Prior to sampling, static water levels will first be gauged in each of the Site monitoring wells using an electronic water level meter. Low-flow purging and sampling will then be conducted with decontaminated or disposable sampling equipment. During purging, AECOM will collect the field groundwater quality parameters of dissolved oxygen, pH, conductivity, temperature, and oxidation-reduction potential using a multi-parameter water quality meter equipped with a flow-through cell. After water quality parameters stabilize with three consecutive measurements of each parameter within 10 percent of each other, groundwater samples will be transferred into laboratory prepared sample containers. Groundwater monitoring well samples will be analyzed for VOCs. Based on previous non-detect groundwater sample results for SVOCs, additional groundwater sampling for SVOCs is not proposed.

3.2.4 Surface Water Sampling

Based on detections of VOCs in surface water samples collected during the Phase I RI, another round of surface water sampling is proposed in the tributary located adjacent to the Site. AECOM proposes to conduct the surface water sampling at the same time as the groundwater sampling discussed in Section 3.2.3 above. In addition to collecting four surface water samples at the same locations sampled during the Phase I RI, one surface water sample will be collected upstream and one surface water sample will be collected downstream of the Site. Surface water sample locations are shown on Figure 8.

Samples will be collected by directly submerging the sample containers in the upstream direction of where the sampler is standing to minimize sample disturbance. Special care will be taken to not displace the preservatives from the laboratory containers. Surface water samples will be analyzed for VOCs.

3.3 Field Procedures

In order to preserve sample integrity, samples will be collected in the appropriate containers, preserved when required and stored at the appropriate temperature. Samples will be carefully packed in coolers, chain of custody documents will be maintained, and samples will be properly shipped or transported to the laboratory using the procedures outlined in this section. These procedures are compliant with the technical requirements outlined in appropriate EPA Region IV *Field Branches Quality System and Technical Procedure* documents.

3.3.1 Field Notebooks

Field notebooks containing information pertinent to the field sampling program will be maintained. The field books will be bound, have pre-numbered pages, and have entries made in indelible ink. Corrections will be made by drawing a line through the incorrect entry and initialing and dating the correction. The field books will be used to record a chronology of events during the field sampling program, to list additional information not recorded on the boring logs or groundwater sample collection records, to detail problems encountered and solutions implemented, and to record contacts made during the field program.

Field books and other field records will be maintained by the Field Manager during field activities and stored in a secure location. Upon completion of field activities, records will be transferred to the central project files as permanent records.

Field books will contain the following:

- Name and location of the Site, project and task number
- Sample depth, well depth
- Water level gauging measurements
- Field measurement technique(s) and detailed information concerning the equipment used, including serial number
- Sampling sequence
- Date(s) and time(s) of each sample collection event and date and time of samples and person(s) physically collecting the samples
- Observations of field activities taking place, progress, and problems (including any unusual or unexpected events)

Each entry in the field notebook will be signed and dated by the author. No pages will be removed from the logbook for any reason. In addition, groundwater sample collection records and chain of custody forms will be prepared and kept as part of the official field record. Field records will be collected and maintained by the Field Manager until completion of the field program or until they are submitted to the project central file.

3.3.2 Soil Sample Collection Record

The following information will be recorded in the project specific field book for each soil sample collected:

- Sample identification

- Sampler's name
- Date and time of sample collection
- Sample depth
- Field testing equipment used
- Sample collection methods
- Light non-aqueous phase liquid (if any)
- Other comments

3.3.3 Groundwater Sample Collection Record

One form will be completed for each groundwater sampling point and each sample collected. The form will include the following information:

- Project identification
- Well number
- Sampler's name and signature
- Weather conditions
- Date and time of collection
- Water level data from the top of the casing
- Well purging data
- Field testing equipment used
- Groundwater temperature, pH, oxidation-reduction potential, dissolved oxygen, and specific conductivity
- Sample collection method
- Appropriate comments

3.3.4 Sample Containers and Preservation

Appropriate containers will be used during sample collection. Appropriate containers are defined as pre-cleaned, pre-preserved containers supplied by the analytical laboratory for each analysis to be performed. These containers are to be shipped from the laboratory with Teflon-lined caps that are securely fastened. Samples will be transferred directly from the sampling device or compositing equipment to laboratory prepared containers.

Samples will be labeled and then placed in coolers with ice in accordance with EPA protocols. Samples will be delivered or shipped to the laboratory for analysis or transferred to the laboratory's courier within the holding time requirement from the date of collection.

3.3.5 Sample Custody Documentation

Samples will be identified using a sample label or other appropriate identification attached to the sample container. Each label will provide, at minimum, the following information:

- Project identification
- Sample location
- Sample identification
- Date of collection
- Time of collection
- Type of sample (grab or composite)
- Preservative
- Analysis requested
- Special conditions or requirements
- Sampler's initials

The actual sample labels utilized may vary in format depending upon the selected laboratory but the information provided will be complete.

3.3.6 Chain-of-Custody Record

The designated person responsible for the sampling event will complete the chain of custody record fully in indelible ink. The custody record will include the information recorded on the sample labels. Additional information on the chain of custody record will include:

- Sample matrix
- Container size and number of containers per sample
- Custody seal number
- Transfer signatures

The actual chain of custody form utilized may vary in format depending upon the selected laboratory but the information provided will be complete.

3.3.7 Transfer of Custody and Shipment

Samples will be properly packaged and labeled for shipment or transfer to the appropriate laboratory. A separate chain of custody record will be prepared for each package containing samples. Shipping of samples will be in conformance with United States Department of Transportation regulations contained in 40 CFR 170-179. If the samples are hand delivered to the laboratory or courier, special requirements or time constraints should be expressed to the sample custodian upon delivery. Special conditions or requirements will be noted on the chain of custody form.

Samples will be handled in accordance with strict chain of custody procedures. The possession of samples will be traceable from the time of collection until they are disposed. Sample information will be documented on a chain of custody form, including preservation, analytical requirements, special conditions, etc.

Samples will be accompanied by a chain of custody form. When transferring the possession of samples, the individual relinquishing and receiving the samples will sign, date, and note the time of transfer on the record. If the samples are transferred to a shipper, the name of the shipper, date of delivery and the shipment tracking number will be noted on the record. Packages will be accompanied by the chain of custody form.

In accordance with requested quality assurance/quality control procedures, the sample custodian or receiver at the laboratory should verify that the information on the chain of custody record matches the contents of the package. The custodian or receiver should sign, date, and note the time of receipt on the record. The record should be included as a part of the analytical data package provided by the laboratory.

3.3.8 Field Duplicates

Field duplicates will be collected at a frequency of one field duplicate per media per 20 samples. Tables 3 through 5 include quality assurance/quality control (QA/QC) sample summaries for soil, groundwater, and surface water, respectively. Field duplicates will be collected by alternately filling two sets of identical sample containers from the interim container used to collect the sample. Field duplicates will be analyzed for the same parameters as their associated parent samples.

3.3.9 Trip Blanks

Trip blanks will originate at the analytical laboratory and will be prepared by filling 40-milliliter glass vials with de-ionized, organic-free water. A trip blank will accompany each laboratory shipment of empty VOC sample containers and will be included in each sample cooler containing samples designated for VOCs analysis. Tables 3 through 5 include QA/QC sample summaries for each respective sample media.

3.3.10 Equipment Blanks

An equipment blank will be collected daily or 1 per 20 samples per media, whichever is greater. These samples will be collected by pouring organic-free, de-ionized water over or through a piece of sampling equipment (i.e., mixing bowl, submersible pump, etc.) and collecting the water into the appropriate containers. Tables 3 through 5 include QA/QC sample summaries for each respective sample media.

3.3.11 Data Validation Procedures

Each data package from the North Carolina Certified laboratory conducting the analytical work will be reviewed for conformance to the requirements of SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods, the EPA Contract Laboratory Program National Functional Guidelines for Organic/Inorganic Data Review, and the EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services.

3.4 Decontamination Procedures

Equipment used during the investigation will be decontaminated using an Alconox™ and water solution in general accordance with appropriate EPA Region IV *Field Branches Quality System and Technical Procedure* documents. Decontamination water will be containerized in 55-gallon drums. Personnel decontamination procedures will be in accordance with the EPA *Field Standard Operating Procedures*

Decontamination of Response Personnel (EPA,1985). Disposable personal protective equipment (PPE) will be containerized in 55-gallon drums.

3.5 Management of Investigative Derived Waste

Investigative derived waste (IDW) including soil cuttings, decontamination water, well development water, purge water, and PPE will be managed in accordance with current EPA Region IV *Field Branches Quality System and Technical Procedure* documents. Each waste stream will be stored in separate, labeled 55-gallon drums and staged in a central location on-site pending waste characterization. Drums will be labeled with date of generation, contents (e.g. soil cuttings from MW-7), and generator contact information.

Representative samples of each waste stream will be collected for waste profiling. Up to 10 drums of waste from the same waste stream (e.g. soil cuttings from wells with similar VOC concentrations) will be composited to produce a representative sample. Liquid wastes will be analyzed for VOCs and compared to the Regulatory Levels presented in 40 CFR 261.24 to determine if the waste is hazardous or non-hazardous. Soil wastes will be analyzed for toxicity characteristic leaching procedure VOCs and SVOCs and compared to the same Regulatory Levels. It is anticipated that IDW generated from the Site will be non-hazardous.

Once the waste is profiled, waste will be properly manifested and transported off-site to appropriate hazardous or non-hazardous waste disposal facilities. AECOM estimates that a total of approximately 20 drums of IDW will be generated during the investigation.

3.6 Survey

Upon completion of the work described in this Phase II RIWP, AECOM will have borings, wells, and sample locations surveyed by a North Carolina licensed surveyor. This will include determining the elevation of each new monitoring well relative to an established vertical datum.

3.7 Schedule for Work Plan Implementation

The schedule AECOM has developed for this Phase II Remedial Investigation was designed to avoid drilling near the school building during the time periods when school will be in session. Woodson Middle School will be hosting summer school this year.

Description	Start Date	End Date
Submit Phase II RIWP to NCDEQ	June 15, 2016	June 15, 2016
NCDEQ Review and Approval of Phase II RIWP	June 16, 2016	July 1, 2016
Obtain NCDEQ Well Permits for Temporary and Permanent Wells	July 1, 2016	July 8, 2016
Site Preparation and Utility Clearing	July 7, 2016	July 8, 2016
DPT Soil and Groundwater Sampling[1]	July 11, 2016	July 15, 2016
Laboratory Analysis for DPT Samples	July 16, 2015	August 1, 2015
Installation of Permanent Wells[2]	August 8, 2016	August 12, 2016
Monitoring Well and Surface Water Sampling	August 22, 2016	August 24, 2016
Laboratory Analysis for Well and Surface Water Samples	September 6, 2016	September 8, 2016
Survey and Waste Disposal	August 25, 2016	August 26, 2016

Description	Start Date	End Date
First Day of 2016-2017 School Year	August 29, 2016	August 29, 2016
Preparation and Submittal of Phase II RI Report	September 18, 2016	December 18, 2016

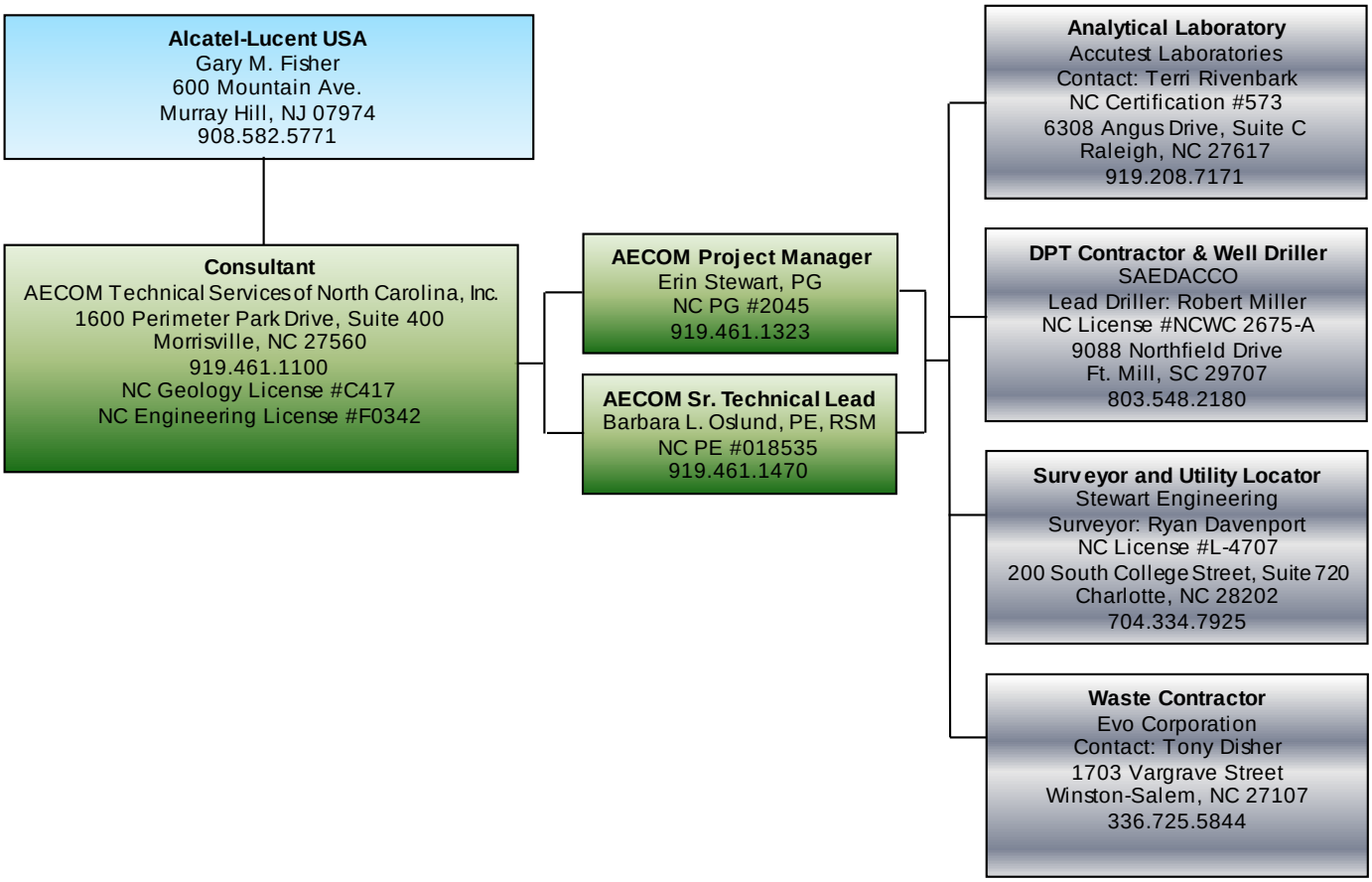
Notes:

[1]DPT locations closest to the school building will be sampled on Friday, July 15, 2016 when there will be no summer classes.

[2]Permanent wells will be installed following completion of summer school due to the anticipated noise level.

3.8 Consultant and Laboratory Qualifications

This section of the Phase II RIWP presents an organization chart for this project. Qualified, licensed subcontractors and a NC-certified laboratory have been selected by AECOM, and that information is provided in the organization chart below.



4 Report

This Section discusses the report that will be prepared for the Site following completion of the Phase II Remedial Investigation field work. The RI Report will include the following components, as required by the IHSB Guidance Document (NCDEQ, 2015b):

1. Description of how the field investigation was conducted, including any variations from this Phase I Remedial Investigation Work Plan
2. Description of groundwater monitoring well installation procedures, construction details and materials, geologic logs, and copies of well permits
3. Scaled map showing the locations of all samples, wells, and known or suspected source areas
4. Description of all laboratory quality assurance/quality control procedures
5. Procedures used to manage IDW
6. Summary of Site geologic conditions, including soil characterization
7. Summary of Site hydrogeologic conditions, including procedure to measure water levels, tabulated water level data, potentiometric maps with groundwater flow patterns depicted, aquifer characteristics, and current uses of groundwater
8. Summary tables for analytical results, copies of lab reports
9. Delineation maps and cross-sections for all media
10. Copies of all field notes, logs, and photographs
11. Any other relevant information
12. Notarized statement from remediating party
13. Notarized statement from consultant responsible for day-to-day investigation activities
14. Applicable professional seals and signatures

5 References

AECOM, 2015a. *Phase I Remedial Investigation Work Plan*. Alcatel-Lucent USA Inc. Charter G. Woodson Charter Middle School (NONCD0001408) Former AT&T Technologies Vargrave Plant. 420 Goldfloss Street, Winston Salem, Forsyth County North Carolina. AECOM, June 3, 2015.

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Tables

Table 1
Proposed Analytical Parameters and Methods
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Media	Analytical Parameter	Purpose of Sample	Constituents to be Analyzed	Analytical Method
Soil	VOCs	Delineation	Dichloromethane (Methylene Chloride)	8260
			Tetrachloroethylene	
			Trichloroethylene	
			1,1-Dichloroethene	
			Cis-1,2-Dichloroethene	
			Trans-1,2-Dichloroethene	
			Vinyl Chloride	
		*Evaluate New Area	Target Compound List VOCs + 10 TICs	8260
	SVOCs	Delineation	2-Methylnaphthalene	8270 Selective Ion Monitoring
			Benzo(a)anthracene	
			Benzo(a)pyrene	
			Benzo(b)fluoranthene	
			Benzo(k)fluoranthene	
			Dibenzo(a,h)anthracene	
			Indeno(1,2,3-cd)pyrene	
			Naphthalene	
			Carbazole	
		*Evaluate New Area	Target Compound List SVOCs + 10 TICs	8270
Groundwater	VOCs	**DPT, New Wells, and Existing Wells	Dichloromethane (Methylene Chloride)	8260
			Tetrachloroethylene	
			Trichloroethylene	
			1,1-Dichloroethene	
			Cis-1,2-Dichloroethene	
			Trans-1,2-Dichloroethene	
			Vinyl Chloride	
			Acetone	
			Bromodichloromethane	
			2-Butanone (MEK)	
			Chloroform	
			Ethylbenzene	
			Methyl Chloride	
			Toluene	
			1,1,1-Trichloroethane	
			Trichlorofluoromethane	
			m,p-Xylene	
			o-Xylene	
			1,1-dichloroethane	
			Chloroethane	
	SVOCs	**New Wells	2-Methylnaphthalene	8270 Selective Ion Monitoring
			Benzo(a)anthracene	
			Benzo(a)pyrene	
			Benzo(b)fluoranthene	
			Benzo(k)fluoranthene	
			Dibenzo(a,h)anthracene	
			Indeno(1,2,3-cd)pyrene	
			Naphthalene	
			Carbazole	

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Media	Analytical Parameter	Purpose of Sample	Constituents to be Analyzed	Analytical Method
Surface Water	VOCs	-	Dichloromethane (Methylene Chloride)	8260
			Tetrachloroethylene	
			Trichloroethylene	
			1,1-Dichloroethene	
			Cis-1,2-Dichloroethene	
			Trans-1,2-Dichloroethene	
			Vinyl Chloride	
			Acetone	
			Bromodichloromethane	
			2-Butanone (MEK)	
			Chloroform	
			Ethylbenzene	
			Methyl Chloride	
			Toluene	
			1,1,1-Trichloroethane	
			Trichlorofluoromethane	
			m,p-Xylene	
			o-Xylene	
			1,1-dichloroethane	
			Chloroethane	

Notes:
TIC = tentatively identified compound
SVOC = semi-volatile organic compound
VOC = volatile organic compound
Red text indicates revision to work plan, as requested by NCDEQ on July 5, 2016
*Evaluate New Area samples are limited to borings DPT-44 through DPT-51. See Tables 2 and 3 for specific sample intervals.
**DPT, New Well, and Existing Well sample IDs are provided in Table 4.

Table 2
Proposed Soil Delineation Samples and Rationale
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Phase I RI Delineation Samples					Proposed Phase II Delineation Borings						
Boring ID	Sample Depth	Sample Depth (ft. amsl)	Results Comparison VOCs	Results Comparison SVOCs	Proposed Delineation	Proposed Sample Depth	Sample Depth (ft. amsl)	VOC Samples	VOC Rationale	SVOC Samples	SVOC Rationale
DPT-1B1	0.16-0.50	872.4-872.06	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-1D1	0.16-0.50	872.24-871.9	NE	E(1)	DPT-14	1-2	870.95-869.95	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-15	0.16-0.5	872.17-871.83	✓	Obtain surface soil VOC data (DPT-15 only; DPT-14 and 16 are paved)	✓	PSRG exceedances
					DPT-16	1-2	870.52-869.52	--	No PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-14	5-7	866.95-864.95	--	--	✓	Delineate vertical extent
					DPT-15	5-7	867.33-865.33	--	--	✓	Delineate vertical extent
					DPT-16	5-7	866.52-864.52	--	--	✓	Delineate vertical extent
DPT-2A1	0.16-0.50	872.25-871.91	NE	NE	DPT-18	0.16-0.5	871.26-870.92	✓	Obtain surface soil data	✓	Obtain surface soil data
	4-6	868.41-866.41	NE	NE	DPT-18	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	8-10	864.41-862.41	NE	NE	DPT-18	7-9	864.42-862.42	✓	Delineate vertical extent	✓	Delineate vertical extent
	13-15	859.41-857.41	E(1)	E(2)	DPT-18	12-14	859.42-857.42	✓	PSRG exceedances	✓	PSRG exceedances
	18-20	854.41-852.41	NE	E(0)	DPT-18	17-19	854.42-852.42	✓	Delineate vertical extent	✓	PSRG exceedances; deeper sample not proposed due to water table
DPT-2B1	0.16-0.50	870.91-870.57	NE	E(2)	--	--	--	--	See DPT-2B2	--	See DPT-2B2
	4-6	867.07-865.07	NE	E(0)	--	--	--	--	See DPT-2B2	--	See DPT-2B2
	8-10	863.07-861.07	NE	NE	--	--	--	--	See DPT-2B2	--	See DPT-2B2
	13-15	858.07-856.07	E(2)	E(1)	--	--	--	--	See DPT-2B2	--	See DPT-2B2
	18-20	853.07-851.07	E(0)	NE	--	--	--	--	See DPT-2B2	--	See DPT-2B2
DPT-2B2	0.16-0.50	870.59-870.25	NE	E(0)	DPT-18	0.16-0.5	871.26-870.92	✓	Obtain surface soil data	✓	PSRG exceedances
					DPT-19	0.16-0.5	868.06-867.72	✓	Obtain surface soil data	✓	PSRG exceedances
	4-6	866.75-864.75	NE	E(1)	DPT-18	5-7	866.42-864.42	✓	Delineate vertical extent	✓	PSRG exceedances
					DPT-19	2-4	866.22-864.22	✓	Delineate vertical extent	✓	PSRG exceedances
	13-15	857.75-855.75	E(0)	E(1)	DPT-18	14-16	857.42-855.42	✓	PSRG exceedances	✓	PSRG exceedances
					DPT-19	11-13	857.22-855.22	✓	PSRG exceedances	✓	PSRG exceedances
	18-20	852.75-850.75	NE	NE	DPT-18	19-21	852.42-850.42	✓	Delineate vertical extent	✓	Delineate vertical extent
					DPT-19	16-18	852.22-850.22	✓	Delineate vertical extent	✓	Delineate vertical extent
DPT-2C1	0.16-0.50	868.4-868.06	NE	E(0)	--	--	--	--	See DPT-2C2	--	See DPT-2C2
	4-6	864.56-862.56	NE	E(1)	--	--	--	--	See DPT-2C2	--	See DPT-2C2
	8-10	860.56-858.56	E(1)	E(1)	--	--	--	--	See DPT-2C2	--	See DPT-2C2
	13-15	855.56-853.56	NE	NE	--	--	--	--	See DPT-2C2	--	See DPT-2C2
	18-20	850.56-848.56	E(0)	NE	--	--	--	--	See DPT-2C2	--	See DPT-2C2
DPT-2C2	0.16-0.50	865.61-865.27	NE	E(1)	DPT-24	0.16-0.5	867.51-867.17	✓	Delineate vertical extent	✓	PSRG exceedances
	4-6	861.77-859.77	E(1)	E(0)	DPT-24	6-8	861.67-859.67	✓	PSRG exceedances	✓	PSRG exceedances
	8-10	857.77-855.77	E(3)	E(1)	DPT-24	10-12	857.67-855.67	✓	PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-24	16-18	851.67-849.67	✓	Delineate vertical extent	✓	Delineate vertical extent
	18-20	847.77-845.77	E(1)	NE	DPT-24	--	--	--	Water table approximately 19 ft. bgs	--	Water table approximately 19 ft. bgs
DPT-2D1	0.16-0.50	871.01-870.67	NE	E(2)	--	--	--	--	See DPT-2D2	--	See DPT-2D2
	4-6	867.17-865.17	NE	NE	--	--	--	--	See DPT-2D2	--	See DPT-2D2
	8-10	863.17-861.17	NE	E(1)	--	--	--	--	See DPT-2D2	--	See DPT-2D2
	13-15	858.17-856.17	E(0)	E(1)	--	--	--	--	See DPT-2D2	--	See DPT-2D2
	18-20	853.17-851.17	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-2D2	0.16-0.50	870.91-870.57	NE	E(1)	DPT-17	0.16-0.5	872.41-872.07	✓	Delineate vertical extent	✓	PSRG exceedances
	8-10	863.07-861.07	E(1)	E(0)	DPT-17	8-10	864.57-862.57	✓	PSRG exceedances	✓	PSRG exceedances
	13-15	858.07-856.07	E(3)	E(1)	DPT-17	14-16	858.57-856.57	✓	PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-17	18-20	854.57-852.57	✓	Delineate vertical extent	✓	Delineate vertical extent
DPT-3A1	--	--	--	--	DPT-20	0.16-0.5	865.28-864.94	✓	Delineate vertical extent	✓	Delineate vertical extent
	4-6	861.77-859.77	E(3)	E(1)	DPT-20	4-6	861.44-859.44	✓	PSRG exceedances	✓	PSRG exceedances
	8-10	857.77-855.77	E(1)	NE	DPT-20	8-10	857.44-855.44	✓	PSRG exceedances	✓	Delineate vertical extent
	14-16	851.77-849.77	NE	NE	DPT-20	14-16	851.44-849.44	✓	Delineate vertical extent	--	No PSRG exceedances
DPT-3A2	--	--	--	--	--	--	--	--	No sample collected at DPT-3A2 during Phase I RI due to steep slope	--	No sample collected at DPT-3A2 during Phase I RI due to steep slope

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Alcatel-Lucent USA Inc.

Phase I RI Delineation Samples					Proposed Phase II Delineation Borings						
Boring ID	Sample Depth	Sample Depth (ft. amsl)	Results Comparison VOCs	Results Comparison SVOCs	Proposed Delineation	Proposed Sample Depth	Sample Depth (ft. amsl)	VOC Samples	VOC Rationale	SVOC Samples	SVOC Rationale
DPT-3B1	4-6	859.02-857.02	E(1)	E(2)	--	--	--	--	See DPT-3B2	--	See DPT-3B2
	8-10	855.02-853.02	NE	NE	--	--	--	--	See DPT-3B2	--	See DPT-3B2
	14-16	849.02-847.02	E(1)	NE	--	--	--	--	See DPT-3B2	--	See DPT-3B2
DPT-3B2	--	--	--	--	DPT-20	0.16-0.5	865.28-864.94	✓	Obtain surface soil data	✓	Delineate vertical extent
					DPT-21	0.16-0.5	862.69-862.35	✓	Obtain surface soil data	✓	Delineate vertical extent
					DPT-22	0.16-0.5	862.82-862.48	✓	Obtain surface soil data	✓	Delineate vertical extent
	4-6	858.95-856.95	NE	E(1)	DPT-20	6-8	859.44-857.44	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-21	4-6	858.85-856.85	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-22	5-7	857.98-855.98	--	No PSRG exceedances	✓	PSRG exceedances
	14-16	848.95-846.95	NE	NE	DPT-20	17-19	848.44-846.44	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-21	14-16	848.85-846.85	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-22	14-16	848.98-846.98	--	No PSRG exceedances	✓	Delineate vertical extent
DPT-3C1	4-6	859.39-857.39	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	8-10	855.39-853.39	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	14-16	849.39-847.39	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-3D1	4-6	860.06-858.06	NE	E(2)	--	--	--	--	See DPT-3D2	--	See DPT-3D2
	8-10	856.06-854.06	NE	NE	--	--	--	--	See DPT-3D2	--	See DPT-3D2
	14-16	850.06-848.06	E(1)	E(0)	--	--	--	--	See DPT-3D2	--	See DPT-3D2
DPT-3D2	--	--	--	--	DPT-23	0.16-0.5	865.09-864.75	✓	Delineate vertical extent	✓	Delineate vertical extent
					DPT-24	0.16-0.5	867.51-867.17	✓	Delineate vertical extent	✓	Delineate vertical extent
	4-6	861.05-859.05	E(0)	E(0)	DPT-23	4-6	861.25-859.25	✓	PSRG exceedances	✓	PSRG exceedances
					DPT-24	6-8	861.67-859.67	✓	PSRG exceedances	✓	PSRG exceedances
	8-10	857.05-855.05	E(0)	NE	DPT-23	8-10	857.25-855.25	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-24	10-12	857.67-855.67	✓	PSRG exceedances	✓	Delineate vertical extent
	14-16	851.05-849.05	E(1)	NE	DPT-23	14-16	851.25-849.25	✓	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
					DPT-24	16-18	851.67-849.67	✓	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
DPT-4A1	--	863.06-863.06	--	--	DPT-22	0.16-0.5	862.82-862.48	✓	Obtain surface soil data	✓	Delineate vertical extent
					DPT-31	0.16-0.5	862.36-862.02	✓	Obtain surface soil data	✓	Delineate vertical extent
					DPT-30	0.16-0.5	861.9-861.56	✓	Obtain surface soil data	✓	Delineate vertical extent
	4-6	859.06-857.06	NE	E(1)	DPT-22	3-5	859.98-857.98	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-31	3-5	859.52-857.52	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-30	3-5	859.06-857.06	--	No PSRG exceedances	✓	PSRG exceedances
	8-10	855.06-853.06	NE	NE	DPT-22	7-9	855.98-853.98	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-31	7-9	855.52-853.52	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-30	7-9	855.06-853.06	--	No PSRG exceedances	✓	Delineate vertical extent
DPT-4B1	--	--	--	--	DPT-22	0.16-0.5	862.82-862.48	✓	Obtain surface soil data	✓	Delineate vertical extent
					DPT-31	0.16-0.5	862.36-862.02	✓	Obtain surface soil data	✓	Delineate vertical extent
					DPT-32	0.16-0.5	861.9-861.56	✓	Obtain surface soil data	✓	Delineate vertical extent
	4-6	858.82-856.82	NE	E(1)	DPT-22	5-7	857.98-855.98	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-31	5-7	857.52-855.52	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-32	5-7	857.06-855.06	--	No PSRG exceedances	✓	PSRG exceedances
	8-10	854.82-852.82	NE	E(0)	DPT-22	9-11	853.98-851.98	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-31	9-11	853.52-851.52	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-32	9-11	853.06-851.06	--	No PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-22	12-14	850.98-848.98	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-31	12-14	850.52-848.52	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-32	12-14	850.06-848.06	--	No PSRG exceedances	✓	Delineate vertical extent
DPT-4C1	4-6	858.37-856.37	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	8-10	854.37-852.37	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-4D1	--	--	--	--	DPT-30	0.16-0.5	864.57-864.23	✓	Obtain surface soil data	✓	Obtain surface soil data
	4-6	859.63-857.63	NE	NE	DPT-30	5-7	859.73-857.73	✓	Delineate vertical extent	--	No PSRG exceedances
	8-10	855.63-853.63	E(0)	NE	DPT-30	9-11	855.73-853.73	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-30	14-16	850.73-848.73	✓	Delineate vertical extent	--	No PSRG exceedances

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Alcatel-Lucent USA Inc.

Phase I RI Delineation Samples					Proposed Phase II Delineation Borings						
Boring ID	Sample Depth	Sample Depth (ft. amsl)	Results Comparison VOCs	Results Comparison SVOCs	Proposed Delineation	Proposed Sample Depth	Sample Depth (ft. amsl)	VOC Samples	VOC Rationale	SVOC Samples	SVOC Rationale
DPT-5A1	1-2	869.53-868.53	NE	NE	DPT-16	1-2	870.52-869.52	✓	Delineate vertical extent	✓	Obtain surface soil data
					DPT-25	1-2	868.82-867.82	✓	Delineate vertical extent	✓	Obtain surface soil data
					DPT-26	0.16-0.5	868.61-868.27	✓	Delineate vertical extent	✓	Obtain surface soil data
					DPT-29	0.16-0.5	870.59-870.25	✓	Delineate vertical extent	✓	Obtain surface soil data
	8-10	862.53-860.53	E(1)	NE	DPT-16	9-11	862.52-860.52	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-25	6-8	863.82-861.82	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-26	6-8	862.77-860.77	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-29	7-9	863.75-861.75	✓	PSRG exceedances	--	No PSRG exceedances
	12-14	858.53-856.53	E(0)	NE	DPT-16	13-15	858.52-856.52	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-25	10-12	859.82-857.82	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-26	10-12	858.77-856.77	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-29	11-13	859.75-857.75	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-16	18-20	853.52-851.52	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-25	16-18	853.82-851.82	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-26	15-17	853.77-851.77	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-29	17-19	853.75-851.75	✓	Delineate vertical extent	--	No PSRG exceedances
DPT-5B1	1-2	869.65-868.65	NE	NE	DPT-16	1-2	870.52-869.52	✓	Delineate vertical extent	✓	Obtain surface soil data
					DPT-29	0.16-0.5	870.59-870.25	✓	Delineate vertical extent	✓	Obtain surface soil data
	8-10	862.65-860.65	E(1)	NE	DPT-16	9-11	862.52-860.52	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-29	7-9	863.75-861.75	✓	PSRG exceedances	--	No PSRG exceedances
	12-14	858.65-856.65	E(1)	NE	DPT-16	13-15	858.52-856.52	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-29	11-13	859.75-857.75	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-16	18-20	853.52-851.52	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-29	17-19	853.75-851.75	✓	Delineate vertical extent	--	No PSRG exceedances
DPT-5C1	1-2	868.9-867.9	E(1)	E(0)	DPT-26	0.16-0.5	868.61-868.27	✓	PSRG exceedances	✓	PSRG exceedances
					DPT-27	0.16-0.5	867.72-867.38	✓	PSRG exceedances	✓	PSRG exceedances
					DPT-28	0.16-0.5	868.31-867.97	✓	PSRG exceedances	✓	PSRG exceedances
					DPT-29	0.16-0.5	870.59-870.25	✓	PSRG exceedances	✓	PSRG exceedances
	8-10	861.9-859.9	E(2)	NE	DPT-26	8-10	860.77-858.77	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-27	6-8	861.88-859.88	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-28	7-9	861.47-859.47	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-29	9-11	861.75-859.75	✓	PSRG exceedances	✓	Delineate vertical extent
	12-14	857.9-855.9	E(1)	NE	DPT-26	12-14	856.77-854.77	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-27	10-12	857.88-855.88	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-28	11-13	857.47-855.47	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-29	13-15	857.75-855.75	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-26	19-21	849.77-847.77	✓	Delineate vertical extent	--	--
					DPT-27	18-20	849.88-847.88	✓	Delineate vertical extent	--	--
					DPT-28	18-20	850.47-848.47	✓	Delineate vertical extent	--	--
					DPT-29	20-22	850.75-848.75	✓	Delineate vertical extent	--	--
DPT-5D1	1-2	868.88-867.88	NE	NE	DPT-25	1-2	868.82-867.82	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-26	0.16-0.5	868.61-868.27	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-27	0.16-0.5	867.72-867.38	✓	Delineate vertical extent	--	No PSRG exceedances
	8-10	861.88-859.88	E(1)	NE	DPT-25	8-10	861.82-859.82	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-26	8-10	860.77-858.77	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-27	6-8	861.88-859.88	✓	PSRG exceedances	--	No PSRG exceedances
	12-14	857.88-855.88	E(1)	NE	DPT-25	12-14	857.82-855.82	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-26	12-14	856.77-854.77	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-27	10-12	857.88-855.88	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-25	18-20	851.82-849.82	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-26	17-19	851.77-849.77	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-27	16-18	851.88-849.88	✓	Delineate vertical extent	--	No PSRG exceedances

Table 2
Proposed Soil Delineation Samples and Rationale
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Phase I RI Delineation Samples					Proposed Phase II Delineation Borings						
Boring ID	Sample Depth	Sample Depth (ft. amsl)	Results Comparison VOCs	Results Comparison SVOCs	Proposed Delineation	Proposed Sample Depth	Sample Depth (ft. amsl)	VOC Samples	VOC Rationale	SVOC Samples	SVOC Rationale
DPT-6A1	1-2	870.23-869.23	NE	NE	DPT-13	1-2	870.68-869.68	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-14	1-2	870.95-869.95	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-16	1-2	870.52-869.52	--	No PSRG exceedances	✓	Delineate vertical extent
	5-7	866.23-864.23	NE	E(0)	DPT-13	4-6	867.68-865.68	✓	Delineate vertical extent	✓	PSRG exceedances
					DPT-14	5-7	866.95-864.95	✓	Delineate vertical extent	✓	PSRG exceedances
					DPT-16	5-7	866.52-864.52	✓	Delineate vertical extent	✓	PSRG exceedances
	8-10	863.23-861.23	E(1)	NE	DPT-13	8-10	863.68-861.68	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-14	8-10	863.95-861.95	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-16	7-9	864.52-862.52	✓	PSRG exceedances	✓	Delineate vertical extent
	--	--	--	--	DPT-13	14-16	857.68-855.68	✓	Delineate vertical extent	--	--
					DPT-14	14-16	857.95-855.95	✓	Delineate vertical extent	--	--
					DPT-16	15-17	856.52-854.52	✓	Delineate vertical extent	--	--
DPT-6B1	1-2	870.01-869.01	NE	NE	DPT-16	--	--	--	No PSRG exceedances	--	No PSRG exceedances
					DPT-29	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	5-7	866.01-864.01	NE	NE	DPT-16	5-7	866.52-864.52	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-29	4-6	866.75-864.75	✓	Delineate vertical extent	--	No PSRG exceedances
	8-10	863.01-861.01	E(1)	NE	DPT-16	7-9	864.52-862.52	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-29	7-9	863.75-861.75	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-16	15-17	856.52-854.52	✓	Delineate vertical extent	--	--
					DPT-29	13-15	857.75-855.75	✓	Delineate vertical extent	--	--
DPT-6D1	1-2	869.59-868.59	NE	NE	DPT-13	1-2	870.68-869.68	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-25	1-2	868.82-867.82	✓	Delineate vertical extent	--	No PSRG exceedances
	5-7	865.59-863.59	E(1)	NE	DPT-13	6-8	865.68-863.68	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-25	4-6	865.82-863.82	✓	PSRG exceedances	--	No PSRG exceedances
	8-10	862.59-860.59	E(1)	NE	DPT-13	10-12	861.68-859.68	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-25	6-8	863.82-861.82	✓	PSRG exceedances	--	No PSRG exceedances
	--	--	--	--	DPT-13	14-16	857.68-855.68	✓	Delineate vertical extent	--	--
					DPT-25	12-14	857.82-855.82	✓	Delineate vertical extent	--	--
DPT-8A1	0.16-0.50	854.95-854.61	NE	E(2)	--	--	--	--	No PSRG exceedances	--	See DPT-8A2
	2-4	853.11-851.11	NE	E(0)	--	--	--	--	No PSRG exceedances	--	See DPT-8A2
	10-12	845.11-843.11	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-8A2	0.16-0.50	855.7-855.36	NE	NE	DPT-38	0.16-0.5	856.54-856.2	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-39	0.16-0.5	858.39-858.05	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-40	0.16-0.5	856.75-856.41	--	No PSRG exceedances	✓	Delineate vertical extent
	2-4	853.86-851.86	NE	E(0)	DPT-38	3-5	853.7-851.7	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-39	5-7	853.55-851.55	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-40	3-5	853.91-851.91	--	No PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-38	10-12	846.7-844.7	--	--	✓	Delineate vertical extent
					DPT-39	12-14	846.55-844.55	--	--	✓	Delineate vertical extent
					DPT-40	10-12	846.91-844.91	--	--	✓	Delineate vertical extent

Table 2
Proposed Soil Delineation Samples and Rationale
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Phase I RI Delineation Samples					Proposed Phase II Delineation Borings						
Boring ID	Sample Depth	Sample Depth (ft. amsl)	Results Comparison VOCs	Results Comparison SVOCs	Proposed Delineation	Proposed Sample Depth	Sample Depth (ft. amsl)	VOC Samples	VOC Rationale	SVOC Samples	SVOC Rationale
DPT-8B1	0.16-0.50	854.97-854.63	NE	E(0)	--	--	--	--	No PSRG exceedances	--	See DPT-8B2
	2-4	853.13-851.13	NE	E(0)	--	--	--	--	No PSRG exceedances	--	See DPT-8B2
	10-12	845.13-843.13	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-8B2	0.16-0.50	854.89-854.55	NE	E(1)	DPT-40	0.16-0.5	856.75-856.41	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-41	0.16-0.5	855.33-854.99	--	No PSRG exceedances	✓	PSRG exceedances
	2-4	853.05-851.05	NE	E(0)	DPT-40	3-5	853.91-851.91	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-41	2-4	853.49-851.49	--	No PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-40	10-12	846.91-844.91	--	--	✓	Delineate vertical extent
					DPT-41	10-12	845.49-843.49	--	--	✓	Delineate vertical extent
DPT-8C1	0.16-0.50	854.68-854.34	NE	E(0)	--	--	--	--	No PSRG exceedances	--	See DPT-8C2
	2-4	852.84-850.84	NE	E(0)	--	--	--	--	No PSRG exceedances	--	See DPT-8C2
	10-12	844.84-842.84	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-8C2	0.16-0.50	854.49-854.15	NE	E(1)	DPT-41	0.16-0.5	855.33-854.99	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-42	0.16-0.5	852.47-852.13	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-43	0.16-0.5	853.74-853.4	--	No PSRG exceedances	✓	PSRG exceedances
	2-4	852.65-850.65	NE	E(0)	DPT-41	4-6	851.49-849.49	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-42	1-3	851.63-849.63	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-43	1-3	852.9-850.9	--	No PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-41	10-12	845.49-843.49	--	--	✓	Delineate vertical extent
					DPT-42	7-9	845.63-843.63	--	--	✓	Delineate vertical extent
					DPT-43	8-10	845.9-843.9	--	--	✓	Delineate vertical extent
DPT-8D1	0.16-0.50	854.4-854.06	NE	E(1)	--	--	--	--	No PSRG exceedances	--	See DPT-8D2
	2-4	852.56-850.56	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	10-12	844.56-842.56	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
DPT-8D2	0.16-0.50	854.44-854.1	NE	E(1)	DPT-38	0.16-0.5	856.54-856.2	--	No PSRG exceedances	✓	PSRG exceedances
					DPT-43	0.16-0.5	853.74-853.4	--	No PSRG exceedances	✓	PSRG exceedances
	--	--	--	--	DPT-38	8-10	848.7-846.7	--	--	✓	Delineate vertical extent
					DPT-43	5-7	848.9-846.9	--	--	✓	Delineate vertical extent
DPT-12A1	0.16-0.50	862.92-862.58	NE	E(0)	DPT-33	0.16-0.5	862.27-861.93	✓	Obtain surface soil data	✓	PSRG exceedances
					DPT-34	0.16-0.5	863.77-863.43	✓	Obtain surface soil data	✓	PSRG exceedances
					DPT-35	0.16-0.5	864.17-863.83	✓	Obtain surface soil data	✓	PSRG exceedances
	5-7	858.08-856.08	NE	NE	DPT-33	4-6	858.43-856.43	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-34	5-7	858.93-856.93	--	No PSRG exceedances	✓	Delineate vertical extent
					DPT-35	6-8	858.33-856.33	--	No PSRG exceedances	✓	Delineate vertical extent
	10-12	853.08-851.08	NE	NE	DPT-33	9-11	853.43-851.43	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-34	10-12	853.93-851.93	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-35	11-13	853.33-851.33	✓	Delineate vertical extent	--	No PSRG exceedances
	18-20	845.08-843.08	E(1)	NE	DPT-33	--	--	--	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
					DPT-34	--	--	--	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
					DPT-35	--	--	--	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
DPT-12B1	0.16-0.50	861.92-861.58	E(0)	E(1)	DPT-33	0.16-0.5	862.27-861.93	✓	PSRG exceedances	✓	PSRG exceedances
					DPT-37	0.16-0.5	859.81-859.47	✓	PSRG exceedances	✓	PSRG exceedances
	5-7	857.08-855.08	E(0)	NE	DPT-33	6-8	856.43-854.43	✓	PSRG exceedances	✓	Delineate vertical extent
					DPT-37	2-4	857.97-855.97	✓	PSRG exceedances	✓	Delineate vertical extent
	10-12	852.08-850.08	NE	NE	DPT-33	10-12	852.43-850.43	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-37	6-8	853.97-851.97	✓	Delineate vertical extent	--	No PSRG exceedances
	18-20	844.08-842.08	E(1)	NE	DPT-33	--	--	--	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
					DPT-37	--	--	--	PSRG exceedances; deeper sample not proposed due to water table	--	No PSRG exceedances
DPT-12C1	0.16-0.50	861.57-861.23	NE	NE	DPT-36	0.16-0.5	861.11-860.77	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-37	0.16-0.5	859.81-859.47	✓	Delineate vertical extent	--	No PSRG exceedances
	5-7	856.73-854.73	E(0)	NE	DPT-36	5-7	856.27-854.27	✓	PSRG exceedances	--	No PSRG exceedances
					DPT-37	4-6	855.97-853.97	✓	PSRG exceedances	--	No PSRG exceedances
	10-12	851.73-849.73	NE	NE	DPT-36	10-12	851.27-849.27	✓	Delineate vertical extent	--	No PSRG exceedances
					DPT-37	8-10	851.97-849.97	✓	Delineate vertical extent	--	No PSRG exceedances
	18-20	843.73-841.73	NE	NE	DPT-36	--	--	--	No PSRG exceedances	--	No PSRG exceedances
					DPT-37	--	--	--	No PSRG exceedances	--	No PSRG exceedances

Table 2
Proposed Soil Delineation Samples and Rationale
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Phase I RI Delineation Samples					Proposed Phase II Delineation Borings						
Boring ID	Sample Depth	Sample Depth (ft. amsl)	Results Comparison VOCs	Results Comparison SVOCs	Proposed Delineation	Proposed Sample Depth	Sample Depth (ft. amsl)	VOC Samples	VOC Rationale	SVOC Samples	SVOC Rationale
DPT-12D1	0.16-0.50	862.58-862.24	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	5-7	857.74-855.74	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	10-12	852.74-850.74	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
	18-20	844.74-842.74	NE	NE	--	--	--	--	No PSRG exceedances	--	No PSRG exceedances
--	--	--	--	--	DPT-44	0.16-0.5	875.36-875.02	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-45	0.16-0.5	874.04-873.7	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-46	0.16-0.5	873.18-872.84	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-47	0.16-0.5	873.64-873.3	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-48	0.16-0.5	869.72-869.38	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-49	0.16-0.5	869.4-869.06	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-50	0.16-0.5	865.28-864.94	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria
	--	--	--	--	DPT-51	0.16-0.5	866.14-865.8	✓	Evaluate surficial soil in footprint of future cafeteria	✓	Evaluate surficial soil in footprint of future cafeteria

Notes:
E(0) = one or more compounds exceeded PSRGs in soil sample (sample concentration same order of magnitude as PSRG)
E(1) = one or more compounds exceeded PSRGs in soil sample (sample concentration one order of magnitude greater than PSRG)
E(2) = one or more compounds exceeded PSRGs in soil sample (sample concentration two orders of magnitude greater than PSRG)
E(3) = one or more compounds exceeded PSRGs in soil sample (sample concentration three orders of magnitude greater than PSRG)
The 0.16-0.5 ft. bgs interval is surface soil interval where grassy cover is present. The 1-2 ft. bgs interval is surface soil interval where asphalt/pavement is present.
NE = no compounds exceeded PSRGs in soil sample
ft. amsl = feet above mean sea level
ft bgs = feet below ground surface
PSRG = North Carolina Inactive Hazardous Sites Branch (IHSB) Preliminary Soil Remediation Goals (PSRG)
SVOC = semi-volatile organic compound
VOC = volatile organic compound

Table 3
Proposed Soil Delineation Sample Summary
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Proposed Boring ID	Sample Interval (ft. bgs.)	Number VOC Samples Required	Number SVOC Samples Required
DPT-13	1-2	1	1
	4-6	1	1
	6-8	1	--
	8-10	1	1
	10-12	1	--
	14-16	1	--
DPT-14	1-2	--	1
	5-7	1	1
	8-10	1	1
	14-16	1	--
DPT-15	0.16-0.5	1	1
	5-7	--	1
DPT-16	1-2	1	1
	5-7	1	1
	7-9	1	1
	9-11	1	--
	13-15	1	--
	15-17	1	--
	18-20	1	--
DPT-17	0.16-0.5	1	1
	8-10	1	1
	14-16	1	1
	18-20	1	1
DPT-18	0.16-0.5	1	1
	5-7	1	1
	7-9	1	1
	12-14	1	1
	14-16	1	1
	17-19	1	1
	19-21	1	1
DPT-19	0.16-0.5	1	1
	2-4	1	1
	11-13	1	1
	16-18	1	1
DPT-20	0.16-0.5	1	1
	4-6	1	1
	6-8	--	1
	8-10	1	1
	14-16	1	--
	17-19	--	1
DPT-21	0.16-0.5	1	1
	4-6	--	1
	14-16	--	1
DPT-22	0.16-0.5	1	1
	3-5	--	1
	5-7	--	1
	7-9	--	1
	9-11	--	1
	12-14	--	1
	14-16	--	1
DPT-23	0.16-0.5	1	1
	4-6	1	1
	8-10	1	1
	14-16	1	--
DPT-24	0.16-0.5	1	1
	6-8	1	1
	10-12	1	1
	16-18	1	1

Table 3
Proposed Soil Delineation Sample Summary
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Proposed Boring ID	Sample Interval (ft. bgs.)	Number VOC Samples Required	Number SVOC Samples Required
DPT-25	1-2	1	1
	4-6	1	--
	6-8	1	--
	8-10	1	--
	10-12	1	--
	12-14	1	--
	16-18	1	--
	18-20	1	--
DPT-26	0.16-0.5	1	1
	6-8	1	--
	8-10	1	1
	10-12	1	--
	12-14	1	--
	15-17	1	--
	17-19	1	--
	19-21	1	--
DPT-27	0.16-0.5	1	1
	6-8	1	1
	10-12	1	--
	16-18	1	--
	18-20	1	--
DPT-28	0.16-0.5	1	1
	7-9	1	1
	11-13	1	--
	18-20	1	--
DPT-29	0.16-0.5	1	1
	4-6	1	--
	7-9	1	--
	9-11	1	1
	11-13	1	--
	13-15	1	--
	17-19	1	--
	20-22	1	--
DPT-30	0.16-0.5	1	1
	3-5	--	1
	5-7	1	--
	7-9	--	1
	9-11	1	--
	14-16	1	--
DPT-31	0.16-0.5	1	1
	3-5	--	1
	5-7	--	1
	7-9	--	1
	9-11	--	1
	12-14	--	1
DPT-32	0.16-0.5	1	1
	5-7	--	1
	9-11	--	1
	12-14	--	1
DPT-33	0.16-0.5	1	1
	4-6	--	1
	6-8	1	1
	9-11	1	--
	10-12	1	--
DPT-34	0.16-0.5	1	1
	5-7	--	1
	10-12	1	--

Table 3
Proposed Soil Delineation Sample Summary
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Proposed Boring ID	Sample Interval (ft. bgs.)	Number VOC Samples Required		Number SVOC Samples Required	
DPT-35	0.16-0.5	1		1	
	6-8	--		1	
	11-13	1		--	
DPT-36	0.16-0.5	1		--	
	5-7	1		--	
	10-12	1		--	
DPT-37	0.16-0.5	1		1	
	2-4	1		1	
	4-6	1		--	
	6-8	1		--	
	8-10	1		--	
DPT-38	0.16-0.5	--		1	
	3-5	--		1	
	8-10	--		1	
	10-12	--		1	
DPT-39	0.16-0.5	--		1	
	5-7	--		1	
	12-14	--		1	
DPT-40	0.16-0.5	--		1	
	3-5	--		1	
	10-12	--		1	
DPT-41	0.16-0.5	--		1	
	2-4	--		1	
	4-6	--		1	
	10-12	--		1	
DPT-42	0.16-0.5	--		1	
	1-3	--		1	
	7-9	--		1	
DPT-43	0.16-0.5	--		1	
	1-3	--		1	
	5-7	--		1	
	8-10	--		1	
DPT-44	0.16-0.5	1		1	
DPT-45	0.16-0.5	1		1	
DPT-46	0.16-0.5	1		1	
DPT-47	0.16-0.5	1		1	
DPT-48	0.16-0.5	1		1	
DPT-49	0.16-0.5	1		1	
DPT-50	0.16-0.5	1		1	
DPT-51	0.16-0.5	1		1	
TOTAL NUMBER PRIMARY SURFACE SAMPLES		32		38	
TOTAL NUMBER PRIMARY SUBSURFACE SAMPLES		77		76	
QA/QC SAMPLES	**Field Duplicate**	1 per 20 samples per matrix	5	1 per 20 samples per matrix	5
	Trip Blanks	1 per cooler of VOC samples	5	NA	--
	Equipment Blanks	1 per day or 1 per 20 samples	5	1 per day or 1 per 20 samples	5
TOTAL NUMBER OF SAMPLES			**124**		**110**

Notes:
Batch QC samples will be used by the laboratory for the matrix spike (MS) and matrix spike duplicate (MSD) analyses
ft bgs = feet below ground surface
QA/QC = quality assurance/quality control
SVOC = semi-volatile organic compound
VOC = volatile organic compound

Table 4
Proposed Groundwater Sample Summary
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Proposed Sample ID	Purpose of Sample	Proposed Groundwater Sample / Monitoring Well Screen Interval (ft. bgs.)	Number VOC Samples Required		Number VOC Samples Required	
GW-12	DPT	20-25	1		-	
		5 foot screen above DPT refusal	1		-	
GW-13	DPT	20-25	1		-	
		5 foot screen above DPT refusal	1		-	
GW-14	DPT	20-25	1		-	
		5 foot screen above DPT refusal	1		-	
GW-15	DPT	15-20	1		-	
		5 foot screen above DPT refusal	1		-	
GW-16	DPT	20-25	1		-	
		5 foot screen above DPT refusal	1		-	
GW-17	DPT	15-20	1		-	
		5 foot screen above DPT refusal	1		-	
MW-1	Existing Well	NA	1		-	
MW-2	Existing Well	NA	1		-	
MW-3	Existing Well	NA	1		-	
MW-3d	New Well	10 foot screen set in first water bearing fracture in competent bedrock	1		1	
MW-4	Existing Well	NA	1		-	
MW-5	Existing Well	NA	1		-	
MW-6	Existing Well	NA	1		-	
MW-7	New Well	10 foot screen interval set based on results of DPT-12 to DPT-17	1		1	
MW-8	New Well	10 foot screen interval set based on results of DPT-12 to DPT-17	1		1	
TOTAL NUMBER OF PRIMARY SAMPLES			21		3	
QA/QC SAMPLES		**Field Duplicate**	Number VOC Samples Required	2	Number VOC Samples Required	1
		Trip Blanks	1 per cooler of VOC samples	2	NA	-
		Equipment Blanks	1 per day or 1 per 20 samples	2	1 per day or 1 per 20 samples	1
TOTAL NUMBER OF SAMPLES				**27**		**5**

Notes:
1. Batch QC samples will be used by the laboratory for the matrix spike (MS) and matrix spike duplicate (MSD) analyses
2. Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 were installed by AECOM during the Phase I RI in August 2015
3. Samples GW-12 through GW-17 will be collected during a separate sampling event from samples MW-1 through MW-8; therefore, separate QA/QC samples will be required.

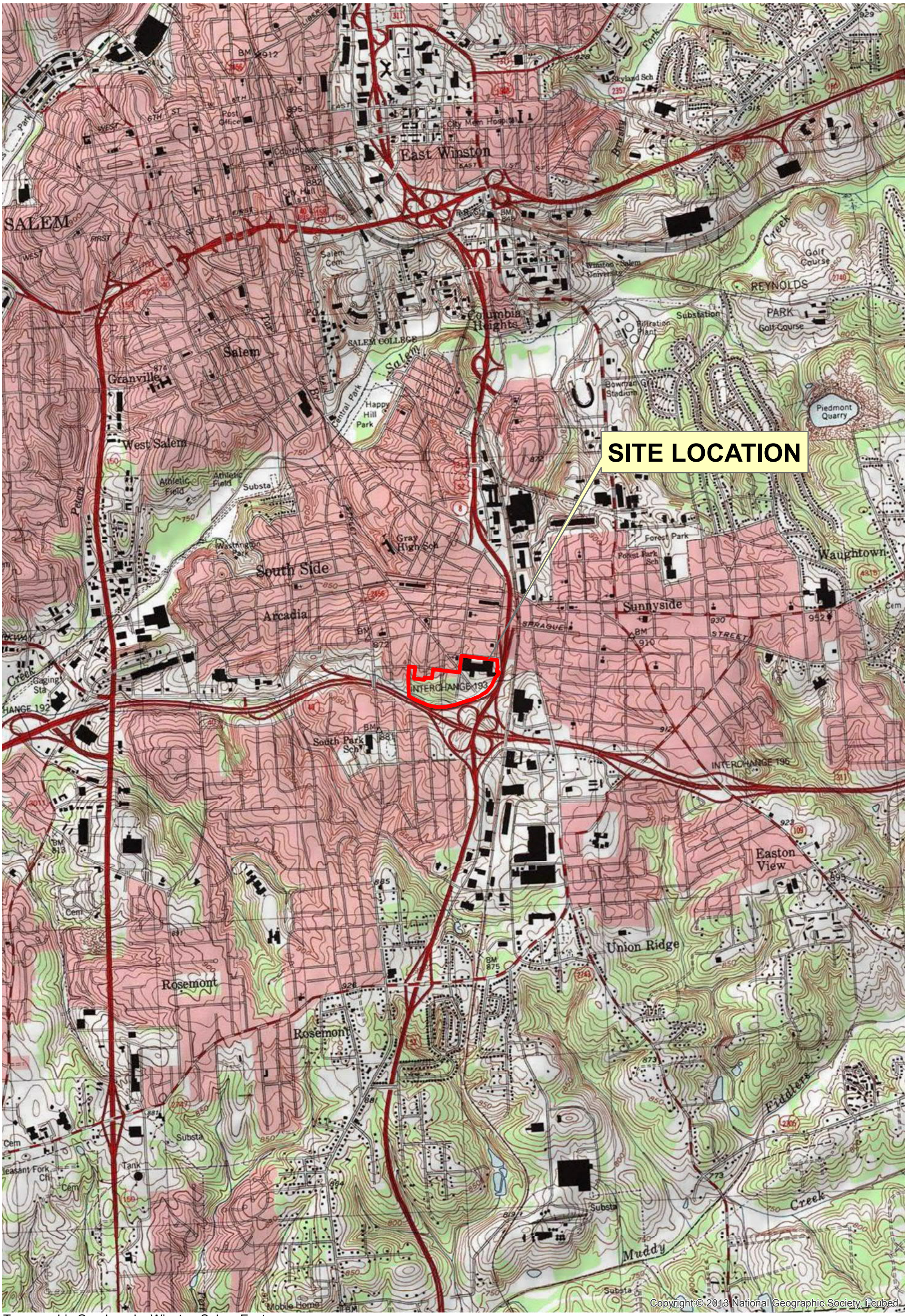
DPT = direct-push technology
ft. bgs = feet below ground surface
NA = not applicable; permanent well installed during the Phase I RI (AECOM, 2015)
QA/QC = quality assurance/quality control
VOC = volatile organic compound

Table 5
Proposed Surface Water Sample Summary
Draft Phase II Remedial Investigation Work Plan
Carter G. Woodson Charter Middle School (NONCD0001408)
Alcatel-Lucent USA Inc.

Proposed Sample ID	Number VOC Samples Required		
SW-01	1		
SW-02	1		
SW-03	1		
SW-04	1		
SW-05	1		
SW-06	1		
TOTAL NUMBER OF PRIMARY SAMPLES		6	
QA/QC SAMPLES	**Field Duplicate**	1 per 20 samples per matrix	1
	Trip Blanks	1 per cooler of VOC samples	1
	Equipment Blanks	1 per day or 1 per 20 samples	1
TOTAL NUMBER OF SAMPLES			**9**

Notes:
Batch QC samples will be used by the laboratory for the matrix spike (MS) and matrix spike duplicate (MSD) analyses
QA/QC = quality assurance/quality control
VOC = volatile organic compound

Figures



Topographic Quadrangle: Winston-Salem East

\\1612SR-M87002\Data\Geomatics\GIS\Projects\A\Alcatel-Lucent_USA\Woodson_Charter_School\MXD\Figure1_SiteLocation_PhaseIRIWP.mxd

Map Location

Legend

Site Parcel

Site Location Map

Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St.
Winston-Salem, Forsyth County, NC, 27127

0 1,000 2,000 3,000 4,000 Feet

1:24,000

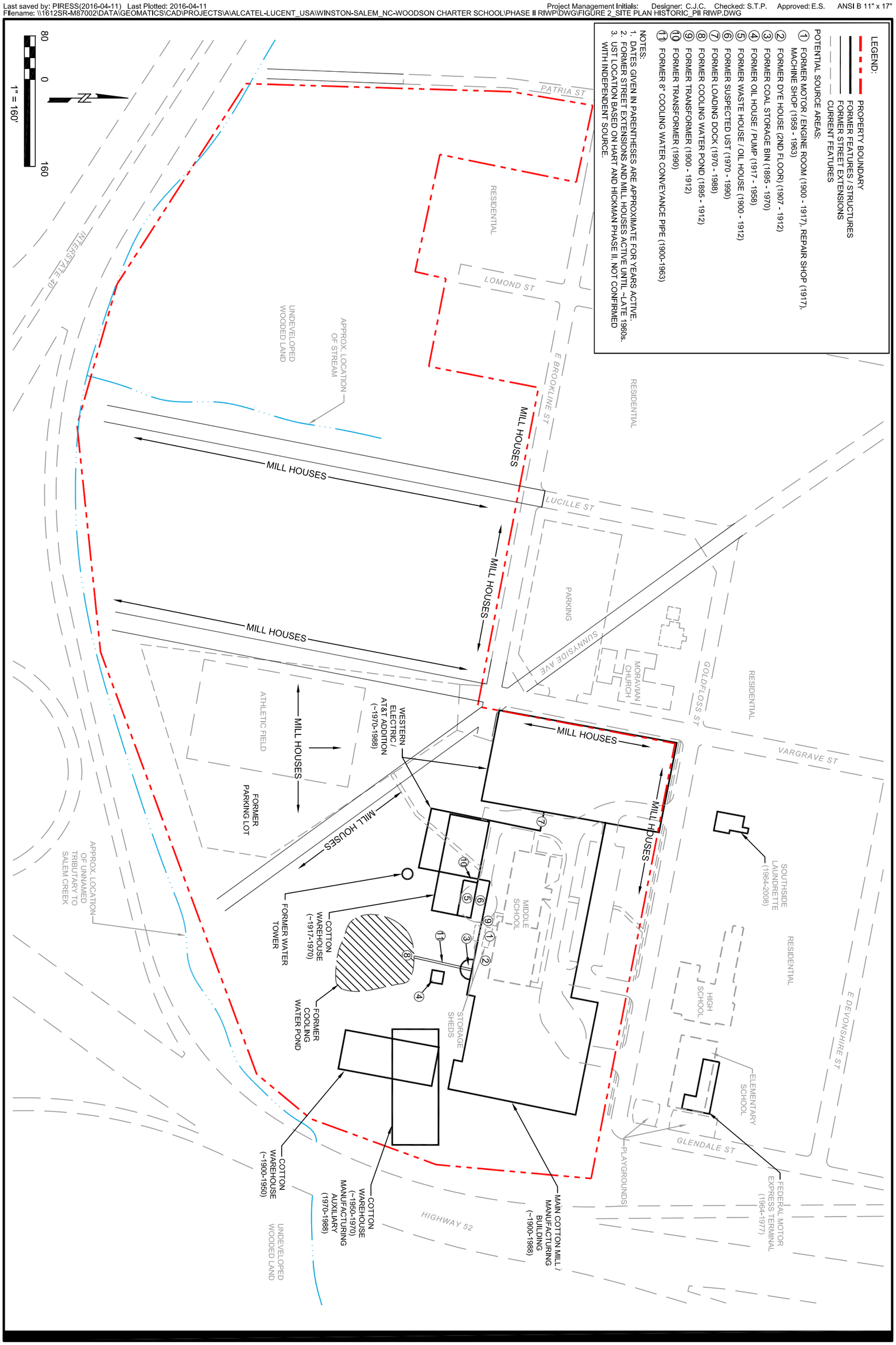
N

April 2016
60476557

Figure 1

AECOM
1600 Perimeter Park Drive, Suite 400
Morrisville, NC 27560
tel: 919-461-1100
fax: 919-461-1235
web: www.aecom.com

Last saved by: PIRESS(2016-04-11) Last Plotted: 2016-04-11
Filename: \\1612SR-M87002\DATA\GEOMATICS\CAD\PROJECTS\A\ALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RIWP\DWG\FIGURE 2_SITE PLAN HISTORIC_PII RIWP.DWG
Project Management Initials: Designer: C.J.C. Checked: S.T.P. Approved: E.S. ANSI B 11" x 17"



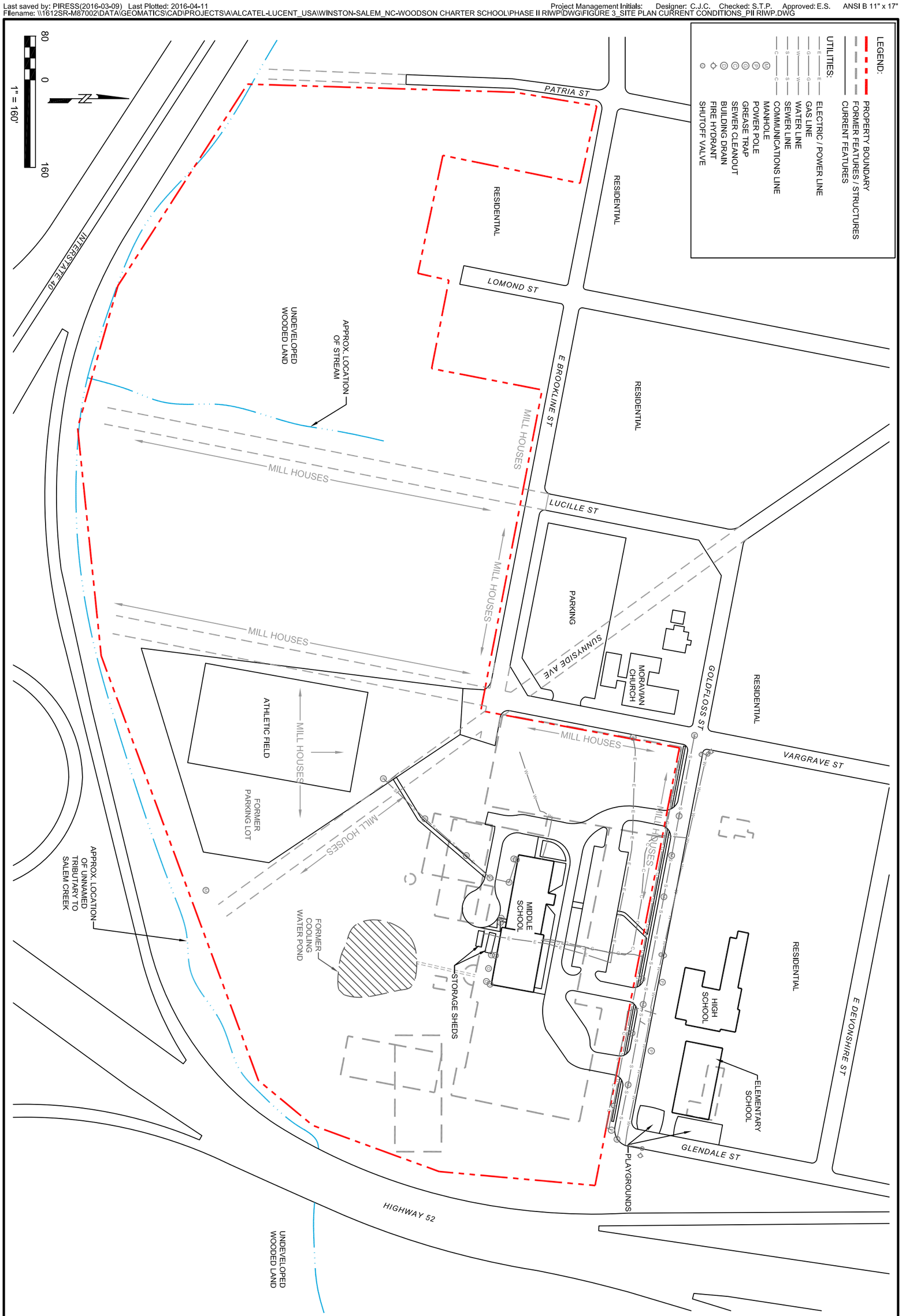
Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557 Date: 04-11-2016

SITE PLAN
(WITH HISTORICAL FEATURES)

AECOM

Figure: 2

Last saved by: PIRESS(2016-03-09) Last Plotted: 2016-04-11
Filename: \\1612SR-M87002\DATA\GEOMATICS\CAD\PROJECTS\A\ALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RIWP\DWG\FIGURE 3_SITE PLAN CURRENT CONDITIONS_PII RIWP.DWG
Project Management Initials: Designer: C.J.C. Checked: S.T.P. Approved: E.S. ANSI B 11" x 17"



Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557 Date: 04-11-2016

SITE PLAN
(CURRENT CONDITIONS)

AECOM

Figure: 3

Project Management Initials: Designer: CC Checked: SP Approved: ES ARCH E 30" x 42"

LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES / STRUCTURES
- CURRENT FEATURES
- PCE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE FOOTPRINT OF PROPOSED CAFETERIA
- TMW-2/SB-2 — TEMPORARY MONITORING WELL / SOIL BORING (HART & HICKMAN - MAY 2014)
- TMW-3/SB-3 — TEMPORARY MONITORING WELL / SOIL BORING (THE EI GROUP - MAY 2014)
- VOC-4 — SOIL BORING / VOLATILE ORGANIC COMPOUNDS (MID ATLANTIC - JULY 2014)
- S-2/S-4 — SOIL BORING (NATIONAL ENVIRONMENTAL TECHNOLOGIES - AUGUST 1990)
- DPT-2D1 — PHASE I REMEDIAL INVESTIGATION SOIL BORING (AECOM 2015)
- DPT-13 — PROPOSED PHASE II REMEDIAL INVESTIGATION SOIL BORING LOCATION

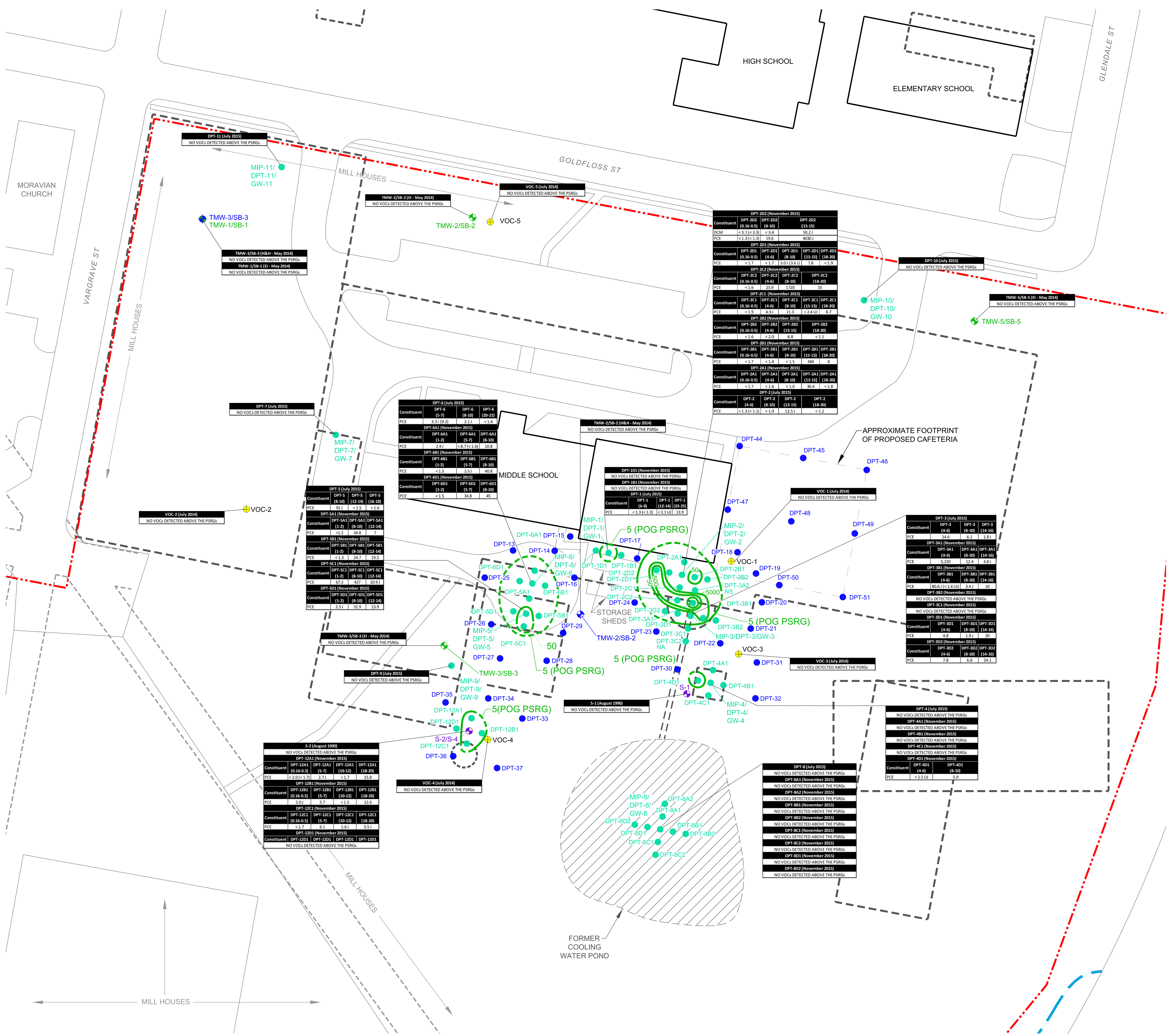
NOTES:
1. DUPLICATE RESULTS SHOWN IN PARENTHESES.
2. RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (µg/kg).
3. ONLY VOCs DETECTED ABOVE THE PSRGs FOR PROTECTION OF GROUNDWATER ARE SHOWN AT EACH SAMPLE LOCATION.
4. NO VOCs DETECTED ABOVE NORTH CAROLINA IHSB RESIDENTIAL HEALTH-BASED PSRGs.
5. PROPOSED BORING LOCATION DPT-3A2 WAS NOT SAMPLED DUE TO STEEP SLOPE.
6. SAMPLES FROM BORING DPT-3C2 WERE NOT ANALYZED BASED ON RESULTS OF ASSOCIATED TIER 1 SAMPLES.
7. THE POG PSRG FOR PCE IS 5 µg/kg. THE POG PSRG FOR DCM IS 23 µg/kg.

ABBREVIATIONS:
DCM = DICHLOROMETHANE (METHYLENE CHLORIDE)
FT. BGS = FEET BELOW GROUND SURFACE
J = ESTIMATED VALUE
NA = NOT ANALYZED
NS = NOT SAMPLED
PCE = TETRACHLOROETHYLENE
VOCs = VOLATILE ORGANIC COMPOUNDS
U = NOT PRESENT ABOVE THE ASSOCIATED DETECTION LIMIT, BLANK CONTAMINATION EXISTS
UJ = NOT DETECTED AND THE ASSOCIATED DETECTION LIMIT IS ESTIMATED
µg/kg = MICROGRAMS PER KILOGRAM
POG PSRG = PROTECTION OF GROUNDWATER PRELIMINARY SOIL REMEDIATION GOAL
RES PSRG = RESIDENTIAL HEALTH-BASED PRELIMINARY SOIL REMEDIATION GOAL

TABLE KEY: (SAMPLE ID; SAMPLE DEPTH (FT. BGS); COMPOUND; RESULTS)

DPT-2D2 (November 2015)

Constituent	DPT-2D2 (0.16-0.5)	DPT-2D2 (8-10)	DPT-2D2 (13-15)
DCM	< 3.1 (< 3.3)	< 3.4	50.2 J
PCE	< 1.3 (< 1.3)	19.6	4030 J



DPT-11 (July 2015): NO VOCs DETECTED ABOVE THE PSRGs

VOC-5 (July 2014): NO VOCs DETECTED ABOVE THE PSRGs

TMW-2/SB-2 (EI - May 2014): NO VOCs DETECTED ABOVE THE PSRGs

TMW-3/SB-3 (H&H - May 2014): NO VOCs DETECTED ABOVE THE PSRGs

TMW-1/SB-1 (EI - May 2014): NO VOCs DETECTED ABOVE THE PSRGs

DPT-10 (July 2015): NO VOCs DETECTED ABOVE THE PSRGs

TMW-5/SB-5 (EI - May 2014): NO VOCs DETECTED ABOVE THE PSRGs

DPT-2D2 (November 2015)

Constituent	DPT-2D2 (0.16-0.5)	DPT-2D2 (8-10)	DPT-2D2 (13-15)
DCM	< 3.1 (< 3.3)	< 3.4	50.2 J
PCE	< 1.3 (< 1.3)	19.6	4030 J

DPT-2D1 (November 2015)

Constituent	DPT-2D1 (0.16-0.5)	DPT-2D1 (4-6)	DPT-2D1 (8-10)	DPT-2D1 (13-15)	DPT-2D1 (18-20)
PCE	< 1.7	< 1.7	3.0 J (3.6 J)	7.8	< 1.9

DPT-2C2 (November 2015)

Constituent	DPT-2C2 (0.16-0.5)	DPT-2C2 (4-6)	DPT-2C2 (8-10)	DPT-2C2 (18-20)
PCE	< 1.6	23.9	1720	10

DPT-2C1 (November 2015)

Constituent	DPT-2C1 (0.16-0.5)	DPT-2C1 (4-6)	DPT-2C1 (8-10)	DPT-2C1 (13-15)	DPT-2C1 (18-20)
PCE	< 1.9	4.3 J	11.3	< 2.4 UJ	8.7

DPT-2B2 (November 2015)

Constituent	DPT-2B2 (0.16-0.5)	DPT-2B2 (4-6)	DPT-2B2 (13-15)	DPT-2B2 (18-20)
PCE	< 1.6	< 2.0	6.8	< 1.5

DPT-2B1 (November 2015)

Constituent	DPT-2B1 (0.16-0.5)	DPT-2B1 (4-6)	DPT-2B1 (8-10)	DPT-2B1 (13-15)	DPT-2B1 (18-20)
PCE	< 1.7	< 1.4	< 1.5	484	8

DPT-2A1 (November 2015)

Constituent	DPT-2A1 (0.16-0.5)	DPT-2A1 (4-6)	DPT-2A1 (8-10)	DPT-2A1 (13-15)	DPT-2A1 (18-20)
PCE	< 1.7	< 1.6	< 1.6	36.6	< 1.8

DPT-2 (July 2015)

Constituent	DPT-2 (4-6)	DPT-2 (8-10)	DPT-2 (13-15)	DPT-2 (18-20)
PCE	< 1.3 (< 1.1)	< 1.0	12.5 J	< 1.2

DPT-7 (July 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-6 (July 2015)

Constituent	DPT-6 (5-7)	DPT-6 (8-10)	DPT-6 (20-22)
PCE	3.3 J (9.2)	2.1 J	< 1.6

DPT-6A1 (November 2015)

Constituent	DPT-6A1 (1-2)	DPT-6A1 (5-7)	DPT-6A1 (8-10)
PCE	2.4 J	< 8.7 (< 1.6)	10.8

DPT-6B1 (November 2015)

Constituent	DPT-6B1 (1-2)	DPT-6B1 (5-7)	DPT-6B1 (8-10)
PCE	< 1.5	2.6 J	40.8

DPT-6D1 (November 2015)

Constituent	DPT-6D1 (1-2)	DPT-6D1 (5-7)	DPT-6D1 (8-10)
PCE	< 1.5	34.8	45

TMW-2/SB-2 (H&H - May 2014): NO VOCs DETECTED ABOVE THE PSRGs

DPT-1D1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-1B1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-1 (July 2015)

Constituent	DPT-1 (6-8)	DPT-1 (12-14)	DPT-1 (23-25)
PCE	< 1.3 (< 1.3)	< 2.1 UJ	13.9

VOC-1 (July 2014): NO VOCs DETECTED ABOVE THE PSRGs

VOC-2 (July 2014): NO VOCs DETECTED ABOVE THE PSRGs

DPT-5 (July 2015)

Constituent	DPT-5 (8-10)	DPT-5 (12-14)	DPT-5 (16-18)
PCE	91 J	< 1.5	< 1.6

DPT-5A1 (November 2015)

Constituent	DPT-5A1 (1-2)	DPT-5A1 (8-10)	DPT-5A1 (12-14)
PCE	<1.2	34.8	7

DPT-5B1 (November 2015)

Constituent	DPT-5B1 (1-2)	DPT-5B1 (8-10)	DPT-5B1 (12-14)
PCE	< 1.3	24.7	19.5

DPT-5C1 (November 2015)

Constituent	DPT-5C1 (1-2)	DPT-5C1 (8-10)	DPT-5C1 (12-14)
PCE	67.2	427	10.9 J

DPT-5D1 (November 2015)

Constituent	DPT-5D1 (1-2)	DPT-5D1 (8-10)	DPT-5D1 (12-14)
PCE	2.5 J	31.9	13.9

DPT-3 (July 2015)

Constituent	DPT-3 (4-6)	DPT-3 (8-10)	DPT-3 (14-16)
PCE	14.6	6.1	1.8 J

DPT-3A1 (November 2015)

Constituent	DPT-3A1 (4-6)	DPT-3A1 (8-10)	DPT-3A1 (14-16)
PCE	5,220	12.4	4.8 J

DPT-3B1 (November 2015)

Constituent	DPT-3B1 (4-6)	DPT-3B1 (8-10)	DPT-3B1 (14-16)
PCE	80.6 J (< 1.6 UJ)	3.4 J	10

DPT-3B2 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-3C1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-3D1 (November 2015)

Constituent	DPT-3D1 (4-6)	DPT-3D1 (8-10)	DPT-3D1 (14-16)
PCE	4.8	1.9 J	20

DPT-3D2 (November 2015)

Constituent	DPT-3D2 (4-6)	DPT-3D2 (8-10)	DPT-3D2 (14-16)
PCE	7.8	6.6	24.1

TMW-3/SB-3 (EI - May 2014): NO VOCs DETECTED ABOVE THE PSRGs

DPT-9 (July 2015): NO VOCs DETECTED ABOVE THE PSRGs

VOC-3 (July 2014): NO VOCs DETECTED ABOVE THE PSRGs

S-1 (August 1990): NO VOCs DETECTED ABOVE THE PSRGs

DPT-4 (July 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-4A1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-4B1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-4C1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-4D1 (November 2015)

Constituent	DPT-4D1 (4-6)	DPT-4D1 (8-10)
PCE	< 1.5 UJ	5.9

S-2 (August 1990): NO VOCs DETECTED ABOVE THE PSRGs

DPT-12A1 (November 2015)

Constituent	DPT-12A1 (0.16-0.5)	DPT-12A1 (5-7)	DPT-12A1 (10-12)	DPT-12A1 (18-20)
PCE	< 2.0 (< 1.7)	2.7 J	< 1.7	15.8

DPT-12B1 (November 2015)

Constituent	DPT-12B1 (0.16-0.5)	DPT-12B1 (5-7)	DPT-12B1 (10-12)	DPT-12B1 (18-20)
PCE	5.0 J	5.7	< 1.5	12.6

DPT-12C1 (November 2015)

Constituent	DPT-12C1 (0.16-0.5)	DPT-12C1 (5-7)	DPT-12C1 (10-12)	DPT-12C1 (18-20)
PCE	< 1.7	6.1	1.6 J	3.5 J

DPT-12D1 (November 2015)

Constituent	DPT-12D1	DPT-12D1	DPT-12D1	DPT-12D1
NO VOCs DETECTED ABOVE THE PSRGs				

VOC-4 (July 2014): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8 (July 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8A1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8A2 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8B1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8B2 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8C1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8C2 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8D1 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

DPT-8D2 (November 2015): NO VOCs DETECTED ABOVE THE PSRGs

AECOM

Figure: 4

PROPOSED VOLATILE ORGANIC COMPOUND SOIL SAMPLE LOCATIONS

Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557 Date: 06-08-2016

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Z:\CAD\PROJECTS\A\ALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RI\WP\DWG\FIGURE 4_VOC_PROPOSED BORING LOCATIONS_PII RIWP_CC.DWG

Figure: 5

AECOM

PROPOSED SEMI-VOLATILE ORGANIC COMPOUND SOIL SAMPLE LOCATIONS

Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557   Date: 06-08-2016

ARCH E 30" x 42"   Approved: ES   Checked: SP   Designer: CC   Project Management Initials:

Last saved by: CAMPBELLC(2016-06-09)   Last Plotted: 2016-06-09
Z:\CAD\PROJECTS\A\ALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RIWP\DWG\FIGURE 5_SVOC_PROPOSED BORING LOCATIONS_PII RIWP_CC.DWG

LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES / STRUCTURES
- CURRENT FEATURES
- BENZO(A)PYRENE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE FOOTPRINT OF PROPOSED CAFETERIA
- S-2/S-4 — SOIL BORING (NATIONAL ENVIRONMENTAL TECHNOLOGIES - AUGUST 1990)
- DPT-2D1 — PHASE I REMEDIAL INVESTIGATION SOIL BORING (AECOM 2015)
- DPT-13 — PROPOSED PHASE II REMEDIAL INVESTIGATION SOIL BORING LOCATION

NOTES:
1. DUPLICATE RESULTS SHOWN IN PARENTHESES.
2. RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (μg/kg).
3. ONLY SVOCs DETECTED ABOVE THE PSRGs ARE SHOWN AT EACH SAMPLE LOCATION.
4. PROPOSED BORING LOCATION DPT-3A2 WAS NOT SAMPLED DUE TO STEEP SLOPE.
5. SAMPLES FROM BORING DPT-3C2 WERE NOT ANALYZED BASED ON RESULTS OF ASSOCIATED TIER 1 SAMPLES.

ABBREVIATIONS:
BAP = BENZO(A)PYRENE
FT. BGS = FEET BELOW GROUND SURFACE
J = ESTIMATED VALUE
NA = NOT ANALYZED
NS = NOT SAMPLED
SVOCs = SEMI-VOLATILE ORGANIC COMPOUNDS
UJ = NOT DETECTED AND THE ASSOCIATED DETECTION LIMIT IS ESTIMATED
μg/kg = MICROGRAMS PER KILOGRAM
POG PSRG = PROTECTION OF GROUNDWATER PRELIMINARY SOIL REMEDIATION GOAL
RES PSRG = RESIDENTIAL HEALTH-BASED PRELIMINARY SOIL REMEDIATION GOAL

TABLE KEY:

SAMPLE ID → ; SAMPLE DEPTH (FT. BGS) → ; COMPOUND ; RESULTS

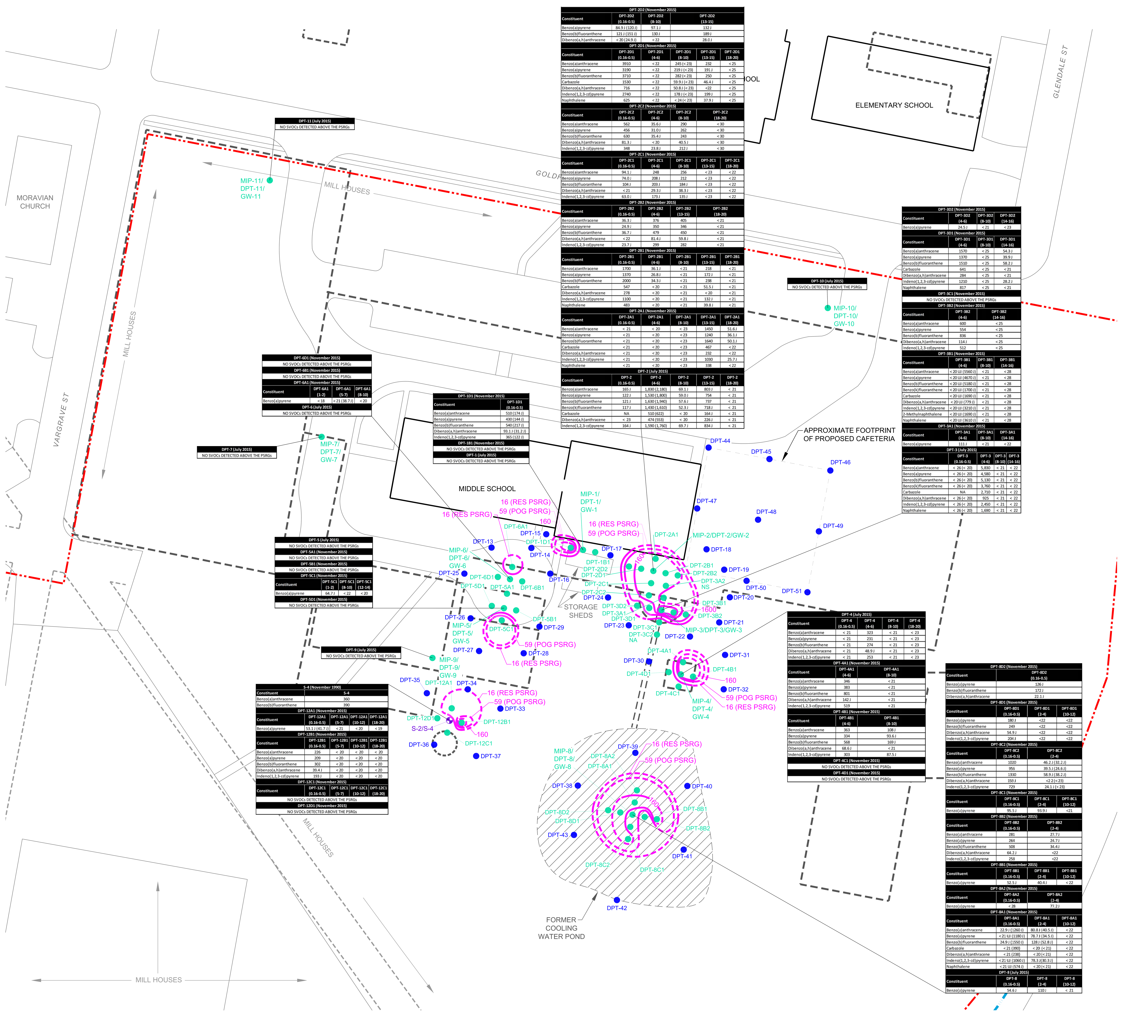
DPT-5 (July 2015)

Constituent	DPT-5 (8-10)	DPT-5 (12-14)	DPT-5 (16-18)
Benzo(a)anthracene	< 21 UJ	< 19	< 19
Benzo(a)pyrene	< 21	< 19	< 19
Benzo(b)fluoranthene	< 21 UJ	< 19	< 19
Benzo(k)fluoranthene	< 21	< 19	< 19
Carbazole	< 21	< 19	< 19
Dibenzo(a,h)anthracene	< 21 UJ	< 19	< 19
Indeno(1,2,3-cd)pyrene	< 21	< 19	< 19
2-Methylnaphthalene	< 21	< 19	< 19
Naphthalene	< 21 UJ	< 19	< 19

PRELIMINARY SOIL REMEDIATION GOALS:

Constituent	RES PSRG (ug/kg)	POG PSRG (ug/kg)
Benzo(a)anthracene	160	180
Benzo(a)pyrene	16	59
Benzo(b)fluoranthene	160	600
Benzo(k)fluoranthene	1,600	5,900
Carbazole	NE	370
Dibenzo(a,h)anthracene	16	190
Indeno(1,2,3-cd)pyrene	160	2,000
2-Methylnaphthalene	48,000	1,600
Naphthalene	3,800	210

15 0 30
1" = 30'



DPT-2D2 (November 2015)

Constituent	DPT-2D2 (0.16-0.5)	DPT-2D2 (8-10)	DPT-2D2 (13-15)
Benzo(a)pyrene	84.9 J (120 J)	97.1 J	132 J
Benzo(b)fluoranthene	121 J (151 J)	130 J	189 J
Dibenzo(a,h)anthracene	< 20 (24.9 J)	< 22	28.0 J

DPT-2D1 (November 2015)

Constituent	DPT-2D1 (0.16-0.5)	DPT-2D1 (4-6)	DPT-2D1 (8-10)	DPT-2D1 (13-15)	DPT-2D1 (18-20)
Benzo(a)anthracene	3910	< 22	245 (< 23)	232	< 25
Benzo(a)pyrene	3190	< 22	219 J (< 23)	191 J	< 25
Benzo(b)fluoranthene	3710	< 22	282 (< 23)	250	< 25
Carbazole	1530	< 22	59.9 J (< 23)	46.4 J	< 25
Dibenzo(a,h)anthracene	716	< 22	50.8 J (< 23)	<22	< 25
Indeno(1,2,3-cd)pyrene	2740	< 22	178 J (< 23)	199 J	< 25
Naphthalene	625	< 22	< 24 (< 23)	37.9 J	< 25

DPT-2C2 (November 2015)

Constituent	DPT-2C2 (0.16-0.5)	DPT-2C2 (4-6)	DPT-2C2 (8-10)	DPT-2C2 (18-20)
Benzo(a)anthracene	562	35.6 J	290	< 30
Benzo(a)pyrene	456	31.0 J	262	< 30
Benzo(b)fluoranthene	630	35.4 J	243	< 30
Dibenzo(a,h)anthracene	81.3 J	< 20	40.5 J	< 30
Indeno(1,2,3-cd)pyrene	348	23.8 J	212 J	< 30

DPT-2C1 (November 2015)

Constituent	DPT-2C1 (0.16-0.5)	DPT-2C1 (4-6)	DPT-2C1 (8-10)	DPT-2C1 (13-15)	DPT-2C1 (18-20)
Benzo(a)anthracene	94.1 J	248	256	< 23	< 22
Benzo(a)pyrene	74.0 J	208 J	212	< 23	< 22
Benzo(b)fluoranthene	104 J	203 J	184 J	< 23	< 22
Dibenzo(a,h)anthracene	< 21	29.3 J	38.3 J	< 23	< 22
Indeno(1,2,3-cd)pyrene	63.0 J	173 J	135 J	< 23	< 22

DPT-2B2 (November 2015)

Constituent	DPT-2B2 (0.16-0.5)	DPT-2B2 (4-6)	DPT-2B2 (13-15)	DPT-2B2 (18-20)
Benzo(a)anthracene	36.3 J	376	405	< 21
Benzo(a)pyrene	24.9 J	350	346	< 21
Benzo(b)fluoranthene	36.7 J	479	450	< 21
Dibenzo(a,h)anthracene	< 22	81.4 J	59.8 J	< 21
Indeno(1,2,3-cd)pyrene	23.7 J	299	282	< 21

DPT-2B1 (November 2015)

Constituent	DPT-2B1 (0.16-0.5)	DPT-2B1 (4-6)	DPT-2B1 (8-10)	DPT-2B1 (13-15)	DPT-2B1 (18-20)
Benzo(a)anthracene	1700	36.1 J	< 21	218	< 21
Benzo(a)pyrene	1370	26.8 J	< 21	172 J	< 21
Benzo(b)fluoranthene	2000	34.3 J	< 21	238	< 21
Carbazole	547	< 20	< 21	51.5 J	< 21
Dibenzo(a,h)anthracene	278	< 20	< 21	< 20	< 21
Indeno(1,2,3-cd)pyrene	1100	< 20	< 21	132 J	< 21
Naphthalene	483	< 20	< 21	39.8 J	< 21

DPT-2A1 (November 2015)

Constituent	DPT-2A1 (0.16-0.5)	DPT-2A1 (4-6)	DPT-2A1 (8-10)	DPT-2A1 (13-15)	DPT-2A1 (18-20)
Benzo(a)anthracene	< 21	< 20	< 23	1450	51.6 J
Benzo(a)pyrene	< 21	< 20	< 23	1240	36.1 J
Benzo(b)fluoranthene	< 21	< 20	< 23	1640	50.1 J
Carbazole	< 21	< 20	< 23	467	< 22
Dibenzo(a,h)anthracene	< 21	< 20	< 23	232	< 22
Indeno(1,2,3-cd)pyrene	< 21	< 20	< 23	1030	25.7 J
Naphthalene	< 21	< 20	< 23	338	< 22

DPT-2 (July 2015)

Constituent	DPT-2 (0.16-0.5)	DPT-2 (4-6)	DPT-2 (8-10)	DPT-2 (13-15)	DPT-2 (18-20)
Benzo(a)anthracene	165 J	1,830 (2,180)	69.1 J	803 J	< 21
Benzo(a)pyrene	122 J	1,530 (1,800)	59.0 J	754	< 21
Benzo(b)fluoranthene	121 J	1,630 (1,940)	57.6 J	737	< 21
Benzo(k)fluoranthene	117 J	1,430 (1,610)	52.3 J	718 J	< 21
Carbazole	NA	510 (622)	< 20	164 J	< 21
Dibenzo(a,h)anthracene	< 23	474 (553)	< 20	226 J	< 21
Indeno(1,2,3-cd)pyrene	164 J	1,590 (1,760)	69.7 J	834 J	< 21

DPT-11 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-6D1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-6B1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-6A1 (November 2015)

Constituent	DPT-6A1 (1-2)	DPT-6A1 (5-7)	DPT-6A1 (8-10)
Benzo(a)pyrene	< 18	< 21 (38.7 J)	< 20

DPT-6 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-1D1 (November 2015)

Constituent	DPT-1D1 (0.16-0.5)
Benzo(a)anthracene	510 (174 J)
Benzo(a)pyrene	430 (144 J)
Benzo(b)fluoranthene	540 (217 J)
Dibenzo(a,h)anthracene	93.1 J (31.2 J)
Indeno(1,2,3-cd)pyrene	365 (122 J)

DPT-1B1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-1 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-7 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-10 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-3D2 (November 2015)

Constituent	DPT-3D2 (4-6)	DPT-3D2 (8-10)	DPT-3D2 (14-16)
Benzo(a)pyrene	24.5 J	< 21	< 23

DPT-3D1 (November 2015)

Constituent	DPT-3D1 (4-6)	DPT-3D1 (8-10)	DPT-3D1 (14-16)
Benzo(a)anthracene	1570	< 25	54.3 J
Benzo(a)pyrene	1370	< 25	39.9 J
Benzo(b)fluoranthene	1510	< 25	58.2 J
Carbazole	641	< 25	< 21
Dibenzo(a,h)anthracene	284	< 25	< 21
Indeno(1,2,3-cd)pyrene	1210	< 25	28.2 J
Naphthalene	817	< 25	< 21

DPT-3C1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-3B2 (November 2015)

Constituent	DPT-3B2 (4-6)	DPT-3B2 (14-16)
Benzo(a)anthracene	600	< 25
Benzo(a)pyrene	554	< 25
Benzo(b)fluoranthene	836	< 25
Dibenzo(a,h)anthracene	114 J	< 25
Indeno(1,2,3-cd)pyrene	512	< 25

DPT-3B1 (November 2015)

Constituent	DPT-3B1 (4-6)	DPT-3B1 (8-10)	DPT-3B1 (14-16)
Benzo(a)anthracene	< 20 UJ (5560 J)	< 21	< 28
Benzo(a)pyrene	< 20 UJ (4670 J)	< 21	< 28
Benzo(b)fluoranthene	< 20 UJ (5180 J)	< 21	< 28
Benzo(k)fluoranthene	< 20 UJ (1700 J)	< 21	< 28
Carbazole	< 20 UJ (1690 J)	< 21	< 28
Dibenzo(a,h)anthracene	< 20 UJ (779 J)	< 21	< 28
Indeno(1,2,3-cd)pyrene	< 20 UJ (3210 J)	< 21	< 28
2-Methylnaphthalene	< 20 UJ (1690 J)	< 21	< 28
Naphthalene	< 20 UJ (3610 J)	< 21	< 28

DPT-3A1 (November 2015)

Constituent	DPT-3A1 (4-6)	DPT-3A1 (8-10)	DPT-3A1 (14-16)
Benzo(a)pyrene	111 J	< 21	< 22

DPT-3 (July 2015)

Constituent	DPT-3 (0.16-0.5)	DPT-3 (4-6)	DPT-3 (8-10)	DPT-3 (14-16)
Benzo(a)anthracene	< 26 (< 20)	5,830	< 21	< 22
Benzo(a)pyrene	< 26 (< 20)	4,580	< 21	< 22
Benzo(b)fluoranthene	< 26 (< 20)	5,130	< 21	< 22
Benzo(k)fluoranthene	< 26 (< 20)	3,760	< 21	< 22
Carbazole	NA	2,710	< 21	< 22
Dibenzo(a,h)anthracene	< 26 (< 20)	925	< 21	< 22
Indeno(1,2,3-cd)pyrene	< 26 (< 20)	2,450	< 21	< 22
Naphthalene	< 26 (< 20)	1,690	< 21	< 22

DPT-5 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-5A1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-5B1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-5C1 (November 2015)

Constituent	DPT-5C1 (1-2)	DPT-5C1 (8-10)	DPT-5C1 (12-14)
Benzo(a)pyrene	64.7 J	< 22	< 20

DPT-5D1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-9 (July 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

S-4 (November 1990)

Constituent	S-4
Benzo(a)anthracene	360
Benzo(b)fluoranthene	390

DPT-12A1 (November 2015)

Constituent	DPT-12A1 (0.16-0.5)	DPT-12A1 (5-7)	DPT-12A1 (10-12)	DPT-12A1 (18-20)
Benzo(a)pyrene	53.1 J (41.7 J)	< 21	< 20	< 19

DPT-12B1 (November 2015)

Constituent	DPT-12B1 (0.16-0.5)	DPT-12B1 (5-7)	DPT-12B1 (10-12)	DPT-12B1 (18-20)
Benzo(a)anthracene	226	< 20	< 20	< 20
Benzo(a)pyrene	209	< 20	< 20	< 20
Benzo(b)fluoranthene	302	< 20	< 20	< 20
Dibenzo(a,h)anthracene	39.4 J	< 20	< 20	< 20
Indeno(1,2,3-cd)pyrene	193 J	< 20	< 20	< 20

DPT-12C1 (November 2015)

Constituent	DPT-12C1 (0.16-0.5)	DPT-12C1 (5-7)	DPT-12C1 (10-12)	DPT-12C1 (18-20)
NO SVOCs DETECTED ABOVE THE PSRGs				

DPT-12D1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-4 (July 2015)

Constituent	DPT-4 (0.16-0.5)	DPT-4 (4-6)	DPT-4 (8-10)	DPT-4 (18-20)
Benzo(a)anthracene	< 21	323	< 21	< 23
Benzo(a)pyrene	< 21	231	< 21	< 23
Benzo(b)fluoranthene	< 21	274	< 21	< 23
Dibenzo(a,h)anthracene	< 21	48.9 J	< 21	< 23
Indeno(1,2,3-cd)pyrene	< 21	253	< 21	< 23

DPT-4A1 (November 2015)

Constituent	DPT-4A1 (4-6)	DPT-4A1 (8-10)
Benzo(a)anthracene	346	< 21
Benzo(a)pyrene	383	< 21
Benzo(b)fluoranthene	801	< 21
Dibenzo(a,h)anthracene	142 J	< 21
Indeno(1,2,3-cd)pyrene	519	< 21

DPT-4B1 (November 2015)

Constituent	DPT-4B1 (4-6)	DPT-4B1 (8-10)
Benzo(a)anthracene	363	108 J
Benzo(a)pyrene	334	93.6 J
Benzo(b)fluoranthene	568	169 J
Dibenzo(a,h)anthracene	68.6 J	< 21
Indeno(1,2,3-cd)pyrene	303	87.5 J

DPT-4C1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-4D1 (November 2015)
NO SVOCs DETECTED ABOVE THE PSRGs

DPT-8D2 (November 2015)

Constituent	DPT-8D2 (0.16-0.5)
Benzo(a)pyrene	126 J
Benzo(b)fluoranthene	172 J
Dibenzo(a,h)anthracene	22.1 J

DPT-8D1 (November 2015)

Constituent	DPT-8D1 (0.16-0.5)	DPT-8D1 (2-4)	DPT-8D1 (10-12)
Benzo(a)pyrene	180 J	<22	<22
Benzo(b)fluoranthene	249	<22	<22
Dibenzo(a,h)anthracene	54.9 J	<22	<22
Indeno(1,2,3-cd)pyrene	204 J	<22	<22

DPT-8C2 (November 2015)

Constituent	DPT-8C2 (0.16-0.5)	DPT-8C2 (2-4)
Benzo(a)anthracene	1020	46.2 J (32.2 J)
Benzo(a)pyrene	956	39.5 J (24.6 J)
Benzo(b)fluoranthene	1330	58.9 J (38.2 J)
Dibenzo(a,h)anthracene	159 J	<2 2 (< 23)
Indeno(1,2,3-cd)pyrene	729	24.1 J (< 23)

DPT-8C1 (November 2015)

Constituent	DPT-8C1 (0.16-0.5)	DPT-8C1 (2-4)	DPT-8C1 (10-12)
Benzo(a)pyrene	95.5 J	93.9 J	<21

DPT-8B2 (November 2015)

Constituent	DPT-8B2 (0.16-0.5)	DPT-8B2 (2-4)
Benzo(a)anthracene	281	27.7 J
Benzo(a)pyrene	264	24.7 J
Benzo(b)fluoranthene	508	34.4 J
Dibenzo(a,h)anthracene	64.2 J	<22
Indeno(1,2,3-cd)pyrene	258	<22

DPT-8B1 (November 2015)

Constituent	DPT-8B1 (0.16-0.5)	DPT-8B1 (2-4)	DPT-8B1 (10-12)
Benzo(a)pyrene	52.5 J	40.4 J	< 22

DPT-8A2 (November 2015)

Constituent	DPT-8A2 (0.16-0.5)	DPT-8A2 (2-4)
Benzo(a)pyrene	< 28	77.2 J

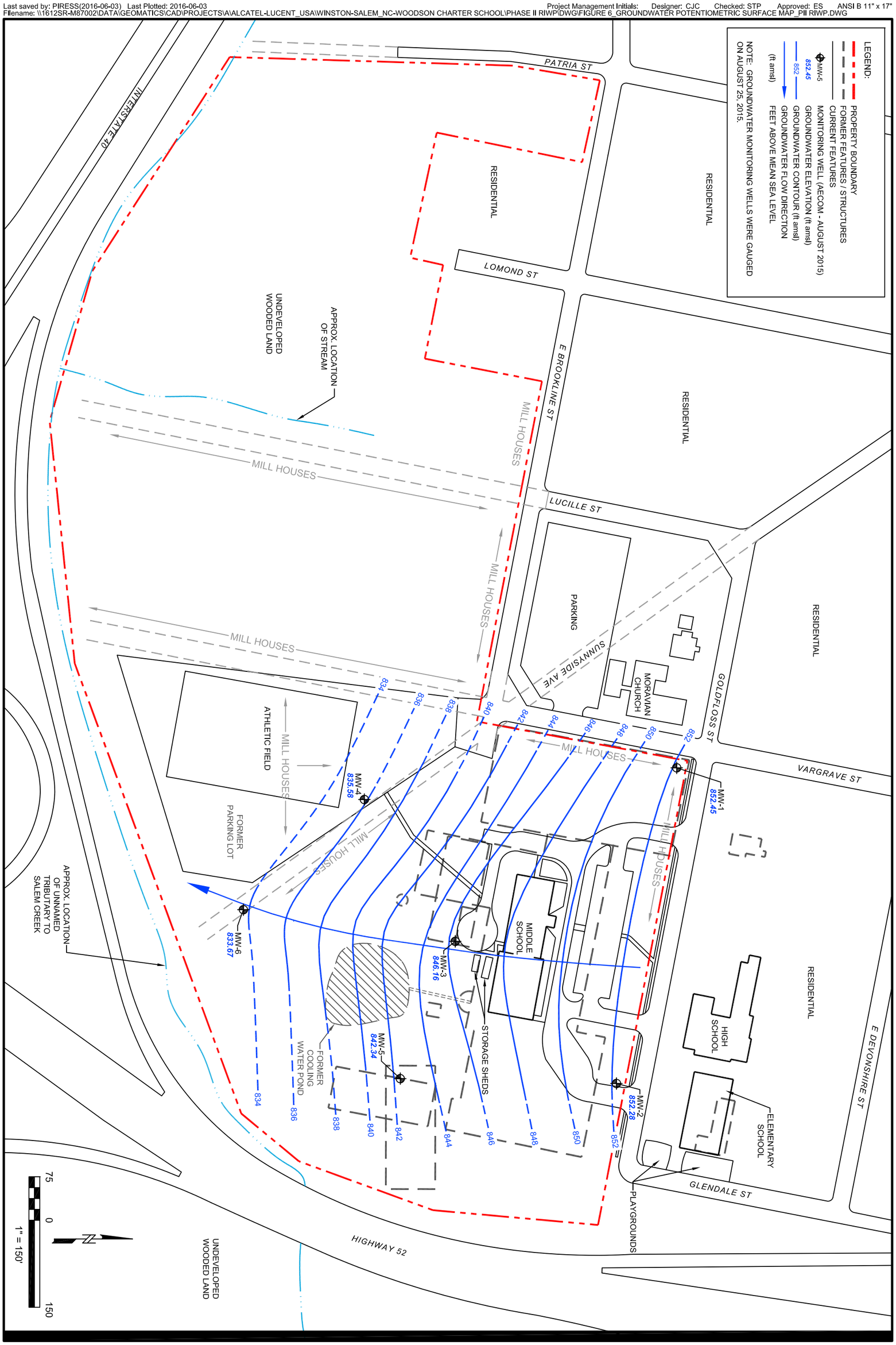
DPT-8A1 (November 2015)

Constituent	DPT-8A1 (0.16-0.5)	DPT-8A1 (2-4)	DPT-8A1 (10-12)
Benzo(a)anthracene	22.9 J (1260 J)	80.8 J (40.5 J)	< 22
Benzo(a)pyrene	< 21 UJ (1180 J)	78.7 J (34.5 J)	< 22
Benzo(b)fluoranthene	24.9 J (1550 J)	128 J (52.8 J)	< 22
Carbazole	< 21 (390)	< 20 (< 21)	< 22
Dibenzo(a,h)anthracene	< 21 (238)	< 20 (< 21)	< 22
Indeno(1,2,3-cd)pyrene	< 21 UJ (1060 J)	78.3 J(30.3 J)	< 22
Naphthalene	< 21 UJ (574 J)	< 20 (< 21)	< 22

DPT-8 (July 2015)

Constituent	DPT-8 (0.16-0.5)	DPT-8 (2-4)	DPT-8 (10-12)
Benzo(a)pyrene	54.6 J	110 J	< 21

Last saved by: PIRESS(2016-06-03) Last Plotted: 2016-06-03 Project Management Initials: Designer: CJC Checked: STP Approved: ES ANSI B 11" x 17"
Filename: \\1612SR-M87002\DATA\GEOMATICS\CAD\PROJECTS\A\ALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RIWP\DWG\FIGURE 6_GROUNDWATER POTENTIOMETRIC SURFACE MAP_PII RIWP.DWG



Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557 Date: 06-03-2016

GROUNDWATER POTENTIONMETRIC SURFACE MAP
AUGUST 2015

AECOM

Figure: 6

AECOM

Figure: 7

PROPOSED GROUNDWATER SAMPLE LOCATIONS

Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557 Date: 06-08-2016

LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES / STRUCTURES
- CURRENT FEATURES
- PCE ISOCONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)

MW-5	MONITORING WELL (AECOM - AUGUST 2015)
MIP-8/ DPT-8/ GW-8	MEMBRANE INTERFACE PROBE AND DIRECT-PUSH TECHNOLOGY BORING FOR SOIL AND GROUNDWATER SAMPLE COLLECTION (AECOM - AUGUST 2015)
TMW-4/SB-4	TEMPORARY MONITORING WELL / SOIL BORING (HART & HICKMAN - MAY 2014)
TMW-3/SB-3	TEMPORARY MONITORING WELL / SOIL BORING (THE EI GROUP - MAY 2014)
MW-7	PROPOSED TYPE II GROUNDWATER MONITORING WELL LOCATION
MW-3d	PROPOSED TYPE III GROUNDWATER MONITORING WELL LOCATION
GW-12	PROPOSED DPT GROUNDWATER SAMPLE LOCATION

NOTES:
1. DUPLICATE RESULTS SHOWN IN PARENTHESES.
2. RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L).
3. ONLY VOCs DETECTED ABOVE THE NC 2L STANDARD ARE SHOWN AT EACH SAMPLE LOCATION.
4. THE MAXIMUM CONCENTRATION OF PCE AT EACH SAMPLE LOCATION IS CONTOURED.
5. THE NC 2L STANDARD FOR PCE AND TCE IN GROUNDWATER IS 0.7 µg/L AND 3 µg/L, RESPECTIVELY (EFFECTIVE APRIL 1, 2013).

ABBREVIATIONS:
EI = THE EI GROUP
FT. BGS = FEET BELOW GROUND SURFACE
H & H = HART & HICKMAN
J = ESTIMATED VALUE
NC 2L STANDARD = NORTH CAROLINA GROUNDWATER STANDARDS LISTED IN TITLE 15 A OF THE NORTH CAROLINA ADMINISTRATIVE CODE, SUBCHAPTER 2L
PCE = TETRACHLOROETHYLENE
TCE = TRICHLOROETHYLENE
VOC = VOLATILE ORGANIC COMPOUND
µg/L = MICROGRAMS PER LITER

TABLE KEY:

SAMPLE ID — SAMPLE DEPTH (FT. BGS)

GW-1 (July 2015)		
Constituent	GW-1 (25-30)	GW-1 (36-40)
PCE	< 0.33	< 0.33
TCE	< 0.22	< 0.22

COMPOUND — RESULTS

GW-11 (July 2015)		
Constituent	GW-11 (16-20)	GW-11 (33.5-37.5)
PCE	< 0.33	1.1

TMW-2/SB-2 (EI - May 2014)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

GW-1 (July 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

TMW-3/SB-3 (H&H - May 2014)	
Constituent	TMW-3/SB-3 (10-25)
PCE	2.1

TMW-1/SB-1 (EI - May 2014)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

MW-1 (August 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

MW-2 (August 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

GW-10 (July 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

GW-7 (July 2015)		
Constituent	GW-7 (20-25)	GW-7 (35-39)
PCE	1.2	6 J

GW-6 (July 2015)		
Constituent	GW-6 (20-30)	GW-6 (30-40)
PCE	40.8	1.2

GW-2 (July 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

TMW-5/SB-5 (EI - May 2014)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

GW-5 (July 2015)		
Constituent	GW-5 (20-25)	GW-5 (33-38)
PCE	163 J (197)	0.77 J

TMW-2/SB-2 (H&H - May 2014)	
Constituent	TMW-2/SB-2 (15-30)
PCE	850
TCE	6.9

TMW-4/SB-4 (EI - May 2014)	
Constituent	(25-30)
PCE	40

TMW-4/SB-4 (H&H - May 2014)	
Constituent	TMW-4/SB-4 (10-25)
PCE	39

TMW-3/SB-3 (EI - May 2014)	
Constituent	TMW-3/SB-3 (25-30)
PCE	2.3

GW-9 (July 2015)		
Constituent	GW-9 (20-25)	GW-9 (33-38)
PCE	12.8	0.42 J

GW-3 (July 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

MW-4 (August 2015)	
Constituent	MW-4 (11-21)
PCE	7.7

MW-5 (August 2015)
NO VOCs DETECTED ABOVE THE NC 2L STANDARDS

GW-4 (July 2015)		
Constituent	GW-4 (20-25)	GW-4 (36-40)
PCE	0.77 J	< 0.33

MW-3 (August 2015)	
Constituent	MW-3 (15-25)
PCE	1,100
TCE	16.1 J

GW-8 (July 2015)		
Constituent	GW-8 (20-25)	GW-8 (36-40)
PCE	< 0.33	5.3

TMW-5/SB-5 (H&H - May 2014)	
Constituent	TMW-5/SB-5 (5-20)
PCE	25

MW-6 (August 2015)	
Constituent	MW-6 (10-20)
PCE	163 (165)

E DEVONSHIRE ST
E BROOKLINE ST
VARGRAVE ST
LUCILLE ST
GLENDALE ST
RESIDENTIAL
HIGH SCHOOL
ELEMENTARY SCHOOL
MORAVIAN CHURCH
PARKING
MIDDLE SCHOOL
MILL HOUSES
FORMER COOLING WATER POND
FORMER PARKING LOT
ATHLETIC FIELD
UNDEVELOPED WOODED LAND
APPROX. LOCATION OF STREAM
APPROX. LOCATION OF UNNAMED TRIBUTARY TO SALEM CREEK
INTERSTATE 40
70
7
0.7 (2L STANDARD)

N

80 0 160

1" = 160'

Last saved by: CAMPBELLC (2016-06-08) Last Plotted: 2016-06-08
Filename: Z:\CAD\PROJECTS\ALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RIWP\DWG\FIGURE 7_PROPOSED GW LOCATIONS_PH II RIWP_CC.DWG

Project Management Initials: Designer: CC
Checked:SP Approved:ES ANSI B 11" x 17"

LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES / STRUCTURES
- CURRENT FEATURES
- SURFACE WATER SAMPLE LOCATION (AECOM - SEPTEMBER 2015)
- SURFACE WATER SAMPLE (THE EI GROUP - MAY 2014)
- SW-05 PROPOSED SURFACE WATER SAMPLE LOCATION

NOTES:

1. DUPLICATE RESULTS SHOWN IN PARENTHESES
2. SURFACE WATER RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L)
3. ONLY VOCs DETECTED ABOVE THE NC 2B STANDARD ARE SHOWN AT EACH SAMPLE LOCATION.
4. THE TRIBUTARY IS NON-EXISTENT AT SAMPLE LOCATION "UPSTREAM (EI - MAY 2014)". THEREFORE, AECOM COULD NOT SAMPLE THIS LOCATION IN SEPTEMBER 2015.

TABLE KEY:

SAMPLE ID

SW-04 (SEPTEMBER 2015)	
Constituent	**SW-04**
PCE	1.6

COMPOUND — RESULTS

ABBREVIATIONS:
EI = THE EI GROUP
FT. BGS = FEET BELOW GROUND SURFACE
PCE = TETRACHLOROETHYLENE
VOC = VOLATILE ORGANIC COMPOUND
NC 2B STANDARD = NORTH CAROLINA SURFACE WATER STANDARDS LISTED IN TITLE 15 A OF THE NORTH CAROLINA ADMINISTRATIVE CODE, SUBCHAPTER 2B
µg/L = MICROGRAMS PER LITER

RESIDENTIAL
E DEVONSHIRE ST
VARGRAVE ST
SUNNYSIDE AVE
GOLDFLOSS ST
ELEMENTARY SCHOOL
HIGH SCHOOL
GLENDALE ST
PLAYGROUNDS
MORAVIAN CHURCH
PARKING
LUCILLE ST
MILL HOUSES
E BROOKLINE ST
LOMOND ST
PATRIA ST
STOCKTON ST
MIDDLE SCHOOL
STORAGE SHEDS
HIGHWAY 52
SW-05
SW-01 (SEPTEMBER 2015)
NO VOCs DETECTED ABOVE THE NC 2B STANDARDS
FORMER COOLING WATER POND
SW-01
SW-06
UPSTREAM (EI - MAY 2014)

Constituent	UPSTREAM
PCE	11

UNDEVELOPED WOODED LAND
APPROX. LOCATION OF STREAM
SW-04 (SEPTEMBER 2015)
NO VOCs DETECTED ABOVE THE NC 2B STANDARDS
SW-04
ATHLETIC FIELD
FORMER PARKING LOT
SW-02 (SEPTEMBER 2015)

Constituent	SW-02
PCE	11

MIDSTREAM (EI - MAY 2014)

Constituent	MIDSTREAM
PCE	12

UNDEVELOPED WOODED LAND
SW-02
SW-03 (SEPTEMBER 2015)

Constituent	SW-03
PCE	3.9 (4.0)

SW-03
APPROX. LOCATION OF UNNAMED TRIBUTARY TO SALEM CREEK
ALCOTT ST
INTERSTATE 40
DOWNSTREAM (EI - MAY 2014)

Constituent	DOWNSTREAM
PCE	10

N
100 0 200
1" = 200'

AECOM
Figure: 8

PROPOSED SURFACE WATER SAMPLE LOCATIONS

Carter G. Woodson Charter Middle School (#NONCD0001408)
Alcatel-Lucent USA Inc.
420 Goldfloss St., Winston-Salem, NC
Project No.: 60476557 Date: 06-08-2016

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Filename: Z:\CAD\PROJECTS\AALCATEL-LUCENT_USA\WINSTON-SALEM_NC-WOODSON CHARTER SCHOOL\PHASE II RI\MPD\WG\FIGURE 8_SW AND SED_PROPOSED BORING LOCATIONS_PI RI\MP_CC.DWG
Project Management Initials: Designer:SP Checked:SP Approved:ES ANSI B 11" x 17"

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AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A *Fortune 500* firm, AECOM companies have annual revenue of approximately US$18 billion. See how we deliver what others can only imagine at aecom.com and @AECOM.

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